7.3.32 N2,N4-Bis[(4-methoxy-3-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926399)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-methoxy-3-phenylaniline were reacted to yield N2,N4-bis[(4-methoxy-3-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.83 (d, 1H, J= 4.2 Hz), 7.57 (bd, 1H, J= 8.7 Hz), 7.48 (d, 1H, J= 2.7 Hz), 7.47-7.22 (m, 12H), 6.85 (d, 1H, J= 8.7 Hz), 6.78 (d, 1H, 9.3 Hz), 3.72 (s, 3H), 3.69 (s, 3H); LCMS: ret. time: 29.97 min.; purity: 92%; MS (m/e): 493 (MH^+).

7.3.33 N2,N4-Bis[(2-methoxy-5-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926400)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-methoxy-5-phenylaniline were reacted to yield N2,N4-bis[(2-methoxy-5-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.03 (d, 1H, J= 6.6 Hz), 7.76 (t, 1H, J= 2.4 Hz), 7.28-7.10 (m, 13H), 7.07 (d, 1H, J= 9 Hz), 7.01 (d, 1H, J= 8.1 Hz), 3.91 (s, 3H), 3.86 (s, 3H); LCMS: ret. time: 18.58 min.; purity: 96%; MS (m/e): MH^+).

7.3.34 N2,N4-Bis[(2-methoxy-5-methyl-4-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926401)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-methoxy-5-methyl-4-phenylaniline were reacted to yield N2,N4-bis[(2-methoxy-5-methyl-4-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.00 (d, 1H, J= 4.8 Hz), 7.73 (s, 1H), 7.66 (s, 1H), 7.43-7.24 (m, 9H), 6.91 (s, 1H), 6.82 (s, 1H), 3.86 (s, 3H), 3.85 (s, 3H), 2.14 (s, 3H), 1.99 (s, 3H); LCMS: ret. time: 19.98 min.; purity: 99%; MS (m/e): 521 (MH^+).

7.3.35 N2,N4-Bis[(2-methyl-5-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926402)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-methyl-5-phenylaniline were reacted to yield N2,N4-bis[(2-methyl-5-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.84 (bd, 1H), 7.51-7.20 (m, 16H), 2.30 (s, 3H), 2.24 (s, 3H); LCMS: ret. time: 18.57 min.; purity: 87%; MS (m/e): 461 (MH^+).

7.3.36 N2,N4-Bis[(3-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926403)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-phenylaniline were reacted to yield N2,N4-bis[(3-phenyl)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.02 (d, 1H, J= 5.1 Hz), 7.82 (t, 1H, J= 1.5 Hz), 7.67 (t, 1H, J= 1.8 Hz), 7.58 (dd, 1H, J= 1.2 and 7.2 Hz), 7.42-7.24 (m, 15H); LCMS: ret. time: 32.06 min.; purity: 94%; MS (m/e): 433 (MH^+).

7.3.37 N2,N4-Bis(4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926405)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-acetoxyaniline were reacted to yield N2,N4-bis[(4-hydroxyphenyl]-5-fluoro-2,4-pyrimidinediamine. After the work up it was observed that the acetoxy group was hydrolyzed to afford the N2,N4-bis(4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine instead of the corresponding acetate derivative. ^{1}H NMR (CD_3OD): δ 7.74 (d, 1H, J= 5.6 Hz), 7.43 (dd, 2H, J= 2.1 and 6.6 Hz), 7.28 (dd, 2H, J= 2.4 and 6.3 Hz), 6.74 (dd, 2H, J= 2.4 and 6.3 Hz), 6.66 (dd, 2H, J= 2.4 and 7.2 Hz); ^{19}F NMR (CD_3OD): - 48116 (d, 1F); LCMS: ret. time: 16.15 min; purity: 100%; MS (m/e): 313 (MH^+).

7.3.38 N2,N4'-Bis(4-hydroxy-3-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R926469)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-hydroxy-3-methylaniline were reacted to yield N2,N4-bis[(4-hydroxy-3-methylphenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.64 (d, 1H, J= 3.6 Hz), 7.11 (t, 2H, J= 9 Hz), 6.70-6.45 (m, 4H), 2.15 (s, 3H), 2.09 (s, 3H); ^{19}F NMR (CD_3OD): - 46278; LCMS: ret. time: 15.53; purity: 84%; MS (m/e): 341 (MH^+).

7.3.39 N2,N4-Bis[4-(tert-butoxycarbonylmethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926574)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and tert-butyl 4-aminophenoxyaeetate were reacted to yield N2,N4-bis[4-(tert-butoxycarbonylmethyleneoxy)phenyl]-5-fluoro-2,4-

pyrimidinediamine ^{1}H NMR ($CDCl_3$): δ 7.88 (s, 1H), 7.48 (d, 2H, J= 8.4 Hz), 7.40 (d, 2H, J= 8.7 Hz), 6.86 (m, 4H), 4.52 (s, 2H), 4.48 (s, 2H), 1.49 (s, 9H), 1.48 (s, 9H); LCMS: ret. time: 28.48 min.; purity: 95%; MS (m/e): 541 (MH^+).

7.3.40 N2,N4-Bis(indol-5-yl)-5-fluoro-2,4-pyrimidinediamine (R926582)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 5-aminoindole were reacted to yield N2,N4-bis(indol-5-yl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.26 min.; purity: 99%; MS (m/e): 359 (MH^+).

7.3.41 N2,N4-Bis(4-cyanomethylphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926319)

In like manner to N2,N4-bis(3-hydroxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine, 2,4-dichloro-5-ethoxycarbonylpyrimidine and 4-cyanomethylaniline were reacted to yield N2,N4-bis(4-cyanomethylphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.72 (s, 1H), 7.64 (m, 4H), 7.32 (d, 2H, J= 8.7 Hz), 7.21 (d, 2H, J= 8.4 Hz), 4.3 (q, 2H, J= 7.0 Hz), 3.97 (s, 2H,), 3.89 (s, 2H), 1.32 (3H, J= 7 Hz); LCMS: ret. time: 30.83 min.; purity: 90 %; MS (m/e): 413 (MH^+).

7.3.42 N2,N4-Bis(3-indazol-6-yl)-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926320)

In like manner to N2,N4-bis(3-hydroxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine, 2,4-dichloro-5-ethoxycarbonylpyrimidine and 6-aminoindazole were reacted to yield N2,N4-bis(6-indazolyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.76 (s, 1H), 7.73(d, 2H J= 8.8), 7.54 (m, 4H), 7.36 (d, 2H, J= 9.5 Hz), 4.3 (q, 2H, J= 7.0 Hz), 1.34 (3H, J= 7 Hz); LCMS: ret. time 27.59 min.; purity: 95 %; MS (m/e): 415 (MH^+).

7.3.43 N2,N4-Bis(3-indazol-7-yl)-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926321)

In like manner to N2,N4-bis(3-hydroxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine, 2,4-dichloro-5-ethoxycarbonylpyrimidine and 7-aminoindazole were reacted to yield N2,N4-bis(7-indazolyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine. ^{1}H NMR

(DMSO-d6): δ 8.70 (s, 1H), 7.54 (d, 2H J= 8.4 Hz), 7.37 (m, 6H), 4.3 (q, 2H, J= 7.0 Hz), 1.33 (3H, J= 7 Hz); LCMS: ret. time 23.61 min.; purity: 94 %; MS (m/e): 415 (MH^+).

7.3.44 N2,N4-Bis[6-(1,4-benzoxazine-3-onyl)]-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926325)

In like manner to to N2,N4-bis(3-hydroxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine, 2,4-dichloro-5-ethoxycarbonylpyrimidine and 6-amino-1,4-benzoxazine-3-one were reacted to yield N2,N4-bis[6-(1,4-benzoxazine-3-onyl)]-5-ethoxycarbonyl-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 8.66 (s, 1H), 7.21 (dd, 2H J= 8.8 and J= 2.2 Hz), 6.89 (d, 2H J= 8.4 Hz), 4.54 (s, 2H) 4.49 (s, 2H) 4.3 (q, 2H, J= 7.0 Hz), 1.33 (3H, J= 7 Hz); LCMS: ret. time 23.08 min.; purity: 88 %; MS (m/e): 477 (MH^+).

7.3.45 N2,N4-Bis(4-ethoxycarbonylmethyleneaminophenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926331)

In like manner to to N2,N4-bis(3-hydroxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine, 2,4-dichloro-5-ethoxycarbonylpyrimidine and 4-ethoxycarbonylmethyleneaminoaniline were reacted to yield N2,N4-bis(4-ethoxycarbonylaminophenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 8.72 (s, 1H), 7.70 (d, 2H J= 8.8 Hz), 7.28 (d, 2H J= 8.4 Hz), 7.05 (d, 2H, J= 8.4 Hz) 6.82 (d, 2H J= 8.4 Hz) 4.5 (m, 4H), 4.23 (m, 6H) 1.53 (m, 9H); LCMS: ret. time 18.08 min.; purity: 85%; MS (m/e): 537 (MH^+).

7.3.46 N2,N4-Bis(4-ethoxyphenyl)-6-methoxycarbonyl-2,4-pyrimidinediamine (R926058)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-6-methoxycarbonylpyrimidine with 4-ethoxyaniline gave N2,N4-bis(4-ethoxyphenyl)-6-methoxycarbonyl-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.42 (bs, 1H), 7.35 (bd, 4H), 6.85 (bs, 1H), 6.75 (bd, 4H), 3.97 (q, 4H, J= 4.8 Hz), 3.92 (s, 3H), 1.36 (t, 6H, J= 6.3 Hz); LCMS: ret. time: 27.47 min.; purity: 97%; MS (m/e): 409 (MH^+).

7.3.47 N2,N4-Bis(4-ethoxyphenyl)-5-methyl-2,4-pyrimidinediamine (R926068)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-methylpyrimidine with 4-

ethoxyaniline gave N2,N4-bis(4-ethoxyphenyl)-5-methyl-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.55 (s, 1H), 7.40 (d, 2H), 7.21 (d, 2H, J= 8.7 Hz), 6.90 (dd, 4H, J= 8.7 Hz), 4.04 (q, 4H, J= 6.6 Hz), 2.17 (m, 6H); LCMS: ret. time: 26.51 min.; purity: 95%; MS (m/e): 365 (MH^+).

7.3.48 N2,N4-Bis(4-ethoxyphenyl)-6-chloro-2,4-pyrimidinediamine (R926072)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4,6-trichloropyrimidine with 4-ethoxyaniline gave N2,N4-bis(4-ethoxyphenyl)-6-chloro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.42 (d, 2H, J= 9 Hz), 7.18 (d, 2H, J= 8.7 Hz), 6.89 (d, 2H, J= 6.3 Hz), 6.84 (d, 2H, J= 8.7 Hz), 6.58 (bs, 1H), 4.02 (m, 4H), 1.43 (m, 6H); LCMS: ret. time: 83.21 min.; purity: 87%; MS (m/e): 385 (MH^+).

7.3.49 N2,N4-Bis(3,4-ethylenedioxyphenyl)-5-methyl-2,4-pyrimidinediamine (R926242)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-methylpyrimidine with 3,4-ethyleneoxyaniline gave N2,N4-bis(3,4-ethylenedioxyphenyl)-5-methyl-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.75 (bs, 1H), 7.06 (d, 1H, J= 2.4 Hz), 6.96 (d, 1H, J= 2.1 Hz), 6.94 (d, 1H, J= 2.1 Hz), 6.85-6.77 (m, 2H), 6.70 (d, 1H, J= 9 Hz), 4.23 (s, 4H), 4.19 (s, 4H), 2.09 (s, 3H); LCMS: ret. time: 22.01 min.; purity: 100%; MS (m/e): 393 (MH^+).

7.3.50 N2,N4-Bis(3,4-ethylenedioxyphenyl)-2,4-pyrimidinediamine (R926243)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloropyrimidine with 3,4-ethyleneoxyaniline gave N2,N4-bis(3,4-ethylenedioxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.95 (s, 1H), 10.50 (s, 1H), 7.84 (bd, 2H), 7.24 (bd, 2H), 6.79 (bd, 2H), 6.40 (bd, 2H), 4.24 (s, 8H); LCMS: ret. time: 21.68 min.; purity: 100%; MS (m/e): 379 (MH^+).

7.3.51 N2,N4-Bis(3-hydroxyphenyl)-5-methyl-2,4-pyrimidinediamine (R926248)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-methylpyrimidine with 3-hydroxyaniline gave N2,N4-bis(3-hydroxyphenyl)-5-methyl-2,4-pyrimidinediamine. LCMS: ret. time: 16.76 min.; purity: 100%, MS (m/e): 309 (MH^+).

7.3.52 N2, N4-Bis(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926249)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloropyrimidine with 3-hydroxyaniline gave N2,N4-bis(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 16.21 min.; purity: 100%; MS (m/e): 295 (MH^+).

7.3.53 N2,N4-Bis[(4-methoxycarbonylmethyleneoxy)phenyl]-2,4-pyrimidinediamine (R926256)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloropyrimidine with methyl 4-aminophenoxyacetate gave N2,N4-bis[(4-methoxycarbonylmethyleneoxy)phenyl]-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 10.7 (bs, 1H), 10.28 (bs, 1H), 7.84 (d, 1H, J= 6.9 Hz), 7.48 (bd, 2H), 7.35 (d, 2H, J= 8.7 Hz), 6.95 (d, 2H, J= 9 Hz), 6.90 (d, 2H, J= 8.7 Hz), 6.35 (d, 1H, J= 6.9 Hz), 4.81 (s, 2H), 4.79 (s, 2H), 3.69 (s, 3H), 3.68 (s, 3H); LCMS: ret. time: 21.27 min.; purity: 98%; MS (m/e): 439 (MH^+).

7.3.54 (±)-N2,N4-Bis[4-methoxycarbonyl(alpha-methyl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R926257)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloropyrimidine with (±)-methyl 2-(4-aminophenoxy)propionate gave (±)-N2,N4-bis[4-methoxycarbonyl(alpha-methyl)methyleneoxyoxyphenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 24.09 min.; purity: 90%; MS (m/e): 467 (MH^+).

7.3.55 N2,N4-Bis(4-methoxycarbonylmethyleneoxyphenyl)-5-methyl-2,4-pyrimidinediamine (R926258)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-methylpyrimidine with methyl-4-aminophenoxyacetate gave N2,N4-bis(4-methoxycarbonylmethyleneoxyphenyl)-5-methyl-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.21 (s, 1H), 9.65 (s, 1H), 7.78 (s, 1H), 7.42 (dd, 2H), J= 2.7 and 8.7 Hz), 7.28 (dd, 2H, J= 8.1 Hz), 6.94 (d, 2H, J= 8.47 Hz), 6.85 (d, 2H, J= 8.7 Hz), 4.82 (s, 2H), 4.77 (s, 2H), 3.69 (s, 3H), 3.68 (s, 3H), 2.12 (s, 3H); LCMS: ret. time: 21.76 min.; purity: 100%; MS (m/e): 453 (MH^+).

7.3.56 (±)-N2,N4-Bis[4-ethoxycarbonyl(alpha-methyl)methyleneoxyphenyl]-5-methyl-2,4-pyrimidinediamine (R926259)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-methylpyrimidine with (±)-ethyl 2-(4-aminophenoxy)propionate gave (±)-N2,N4-bis[4-ethoxycarbonyl(alpha-methyl)methyleneoxyphenyl]-5-methyl-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.9 (bs, 1H), 9.35 (bs, 1H), 7.79 (s, 1H), 7.43 (dd, 2H, J= 3.6 and 8.7 Hz), 7.32 (d, 2H, J= 7.5 Hz), 6.86 (d, 2H, J= 9 Hz), 6.78 (d, 2H, J= 8.7 Hz), 4.95 (q, 1H, J= 7.2 Hz), 4.90 (q, 1H, J= 7.2 Hz), 4.12 (2q, 4H, J= 5.7 Hz), 2.10 (s, 3H), 1.51 (d, 3H, J= 6.3 Hz), 1.47 (d, 3H, J= 6.3 Hz), 1.16 (2t, 6H, J= 5.7 Hz); LCMS: ret. time: 27.41 min.; purity: 96%; MS (m/e): 509 (MH^+).

7.3.57 N2,N4-Bis[2-(4-hydroxyphenyl)ethyl]-5-methyl-2,4-pyrimidinediamine (R926397)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-methylpyrimidine with 2-(4-hydroxyphenyl)ethylamine gave N2,N4-bis[2-(4-hydroxyphenyl)ethyl]-5-methyl-2,4-pyrimidinediamine. LCMS: ret. time: 19.94 min.; purity: 100%; MS (m/e): 365 (MH^+).

7.3.58 N2,N4-Bis-(3,4-dimethoxypenyl)-5-nitro-2,4-pyrimidinediamine (R940089)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-nitropyrimidine with 3,4-dimethoxyaniline gave N2,N4-bis-(3,4-dimethoxyphenyl)-5-nitro-2,4-pyrimidinediamine.

LCMS: ret. time: 28.30 min.; purity: 100%; MS (m/e): 428 (MH^+); ^1H NMR ($CDCl_3$): δ 10.30 (1H, s), 9.14 (1H, s), 7.52 (1H, s), 7.08 (3H, m), 7.00 (1H, d, J= 8.4 Hz), 6.84 (1H, d, J= 8.4 Hz), 6.76 (1H, d, J= 8.4 Hz), 3.90 (3H, s), 3.87 (3H, s), 3.68 (3H, s), 3.60 (3H, s).

7.3.59 N2,N4-Bis-(4-ethoxypenyl)-5-nitro-2,4-pyrimidinediamine (R940090)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-nitropyrimidine with 4-ethoxyaniline gave N2,N4-bis-(4-ethoxyphenyl)-5-nitro-2,4-pyrimidinediamine. LCMS: ret. time: 35.91 min.; purity: 100%; MS (m/e): 396 (MH^+); ^1H NMR ($CDCl_3$): δ 10.25 (1H, s), 9.11 (1H, s), 7.44 (2H, d, J= 8.6 Hz), 7.37 (2H, d, J= 9Hz), 6.88 (2H, d, J= 8.6 Hz), 6.80 (2H, d, J= 8.6 Hz), 4.06 (2H, q, J= 7.2 Hz), 4.02 (2H, q, J= 7.2 Hz), 1.45 (3H, t, J= 7.2 Hz), 1.42 (3H, t, J= 7.2 Hz).

7.3.60 N2,N4-Bis-(3,4-ethylenedioxyphenyl)-5-nitro-2,4-pyrimidinediamine (R940095)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-nitropyrimidine with 3,4-ethylenedioxyaniline gave N2,N4-bis-(3,4-ethylenedioxyphenyl)-5-nitro-2,4-pyrimidinediamine. LCMS: ret. time: 30.78 min.; purity: 100%; MS (m/e): 424 (MH^+); ^1H NMR ($CDCl_3$): δ 10.21 (1H, s), 9.10 (1H, s), 7.40 (1H, s), 7.11-6.71 (6H, m), 4.29 (4H, s), 4.25 (4H, s).

7.3.61 N2,N4-Bis-[(4-ethoxycarbonylmethyleneoxy)phenyl]-5-nitro-2,4-pyrimidinediamine (R940096)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-nitropyrimidine with ethyl-4-aminophenoxyacetate gave N2,N4-bis-[(4-ethoxycarbonylmethyleneoxy)phenyl]-5-nitro-2,4-pyrimidinediamine. LCMS: ret. time: 32.48 min.; purity: 94%; MS (m/e): 512 (MH^+); 1H NMR ($CDCl_3$): δ 10.22 (1H, s), 9.13 (1H, s), 7.50 (1H, s), 7.45 (2H, d, J= 8.7 Hz), 7.38 (2H, d, J= 8.7 Hz), 6.93 (2H, d, J= 8.7 Hz), 6.83 (2H, d, J= 8.7 Hz), 4.67 (2H, s), 4.63 (2H, s), 4.29 (2H, q, J= 7.2 Hz, 4.28 (2H, q, J= 7.2 Hz), 1.31 (3H, t, J= 7.2 Hz), 1.30 (3H, t, J= 7.2 Hz).

7.3.62 N2,N4-Bis-(2,2-difluoro-1,3-benzodioxol-5-yl)-5-nitro-2,4-pyrimidinediamine (R940100)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-nitropyrimidine with 2,2-difluoro-5-amino-1,3-benzodioxole gave N2,N4-bis-(2,2-difluoro-1,3-benzodioxol-5-yl)-5-nitro-2,4-pyrimidinediamine. LCMS: ret. time: 38.15 min.; purity: 96%; MS (m/e): 467 (M^+); ^1H NMR ($CDCl_3$): δ 10.76 (1H, s), 10.49 (1H, s), 9.20 (1H, s), 7.74 (2H, s), 7.56 (1H, d, J= 11.4 Hz), 7.33 (2H, m), 7.20 (1H, m).

7.3.63 N2,N4-Bis-(3,5-dichloro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940215)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-fluoropyrimidine with 3,5-dichloro-4-hydroxyaniline gave N2,N4-bis-(3,5-dichloro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 21.26 min.; purity: 88%; MS (m/e): 450 (M^+); ^1H NMR (DMSO-d6): δ 9.96 (1H, s), 9.59 (1H, s), 9.47 (1H, s), 9.37 (1H, s), 8.22 (1H, d, J= 3.6 Hz), 7.79 (2H, s), 7.74 (2H, s).

7.3.64 N2,N4-Bis-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R940216)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-fluoropyrimidine with 3-chloro-4-hydroxy-5-methylaniline gave N2,N4-bis-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.55 min.; purity: 99%; MS (m/e): 410 (MH^+); ^1H NMR (DMSO-d6): δ 9.23 (1H, s), 9.07 (1H, s), 8.99 (1H, s), 8.66 (1H, s), 8.13 (1H, d, J= 3.6 Hz), 7.59 (2H, t, J= 3.1 Hz), 7.50 (1H, d, J= 2.3 Hz), 7.34 (1H, d, J= 2.3 Hz), 2.27 (3H, s), 2.18 (3H, s).

7.3.65 N2,N4-Bis-(2,3-dimethyl-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940217)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-fluoropyrimidine with 2,3-dimethyl-4-hydroxyaniline gave N2,N4-bis-(2,3-dimethyl-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 19.07 min.; purity: 99%; MS (m/e): 369 (MH^+); ^1H NMR (DMSO-d6): δ 9.21 (1H, s), 8.99 (1H, s), 8.63 (1H, s), 7.92 (1H, s), 7.84 (1H, d, J=

3.6 Hz), 6.94 (1H, d, J= 8.5 Hz), 6.85 (1H, d, J= 8.5 Hz), 6.70 (1H, d, J= 8.5 Hz), 6.58 (1H, d, J= 8.5 Hz), 2.12 (3H, s), 2.06 (3H, s), 2.02 (3H, s), 1.94 (3H, s).

7.3.66 N2,N4-Bis-(4-Acetamidophenyl)-5-fluoro-2,4-pyrimidinediamine (R940222)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,4-dichloro-5-fluoropyrimidine with 4-acetamidoaniline gave N2,N4-bis-(4-acetamidophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 14.82 min.; purity: 95%; MS (m/e): 395 (MH^+); ^1H NMR (DMSO-d6): δ 10.33 (1H, s), 10.14 (1H, s), 10.07 (2H, s), 8.39 (1H, d, J= 5.1 Hz), 7.64 (8H, m), 2.15 (3H, s), 2.13 (3H, s).

7.3.67 N2,N4-Bis(3-isopropylphenyl)-5-fluoro-2,4-pyrimidinediamine R940297

In like manner to the preparation of N2,N4-bis-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-isopropylaniline were reacted to give N2,N4-bis-(3-isopropylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 29.58 min.; Purity: 98 %; MS (m/e): 365 (MH^+); ^1H NMR (DMSO-d6): δ 10.5 (1H, s), 10.34 (1H, s), 8.41 (1H, d, J= 5.1 Hz), 7.62 (1H, d, J= 8.1 Hz), 7.53 (1H, s), 7.43 (1H, d, J= 8.1 Hz), 7.37 (2H, m), 7.29 (1H, t, J= 8.1 Hz), 7.19 (1H, d, J= 7.8 Hz), 7.08 (1H, d, J= 7.8 Hz), 2.88 (2H, m), 1.25 (6H, d, J= 7.2 Hz), 1.201 (6H, d, J= 7.2 Hz).

7.3.68 N2,N4-Bis(3,4,5-trimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926688)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3,4,5-trimethoxyaniline were reacted to yield N2,N4-bis(3,4,5-trimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 19.55 min.; purity: 99 %; MS (m/e): 461 (MH^+).

7.3.69 N2,N4-Bis(2-methyl-5-phenylphenyl)-5-bromo-2,4-pyrimidinediamine R925800

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and 5-phenyl-*ortho*-toluidine were reacted to yield N2,N4-bis(2-methyl-5-phenylphenyl)-5-bromo-2,4-pyrimidinediamine. LCMS: ret. time: 19.54 min.; purity: 90 %; MS (m/e): 422 (MH^+).

7.3.70 N2,N4-Bis(2-methoxy-5-methyl-4-phenylphenyl)-5-bromo-2,4-pyrimidinediamine (R925801)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine 5-methyl-4-phenyl-*ortho*-anisidine were reacted to yield N2,N4-bis(2-methoxy-5-methyl-4-phenylphenyl)-5-bromo-2,4-pyrimidinediamine. LCMS: ret. time: 20.99 min.; purity: 85 %; MS (m/e): 583 (MH^+).

7.3.71 N2,N4-Bis(indol-6-yl)-5-fluoro-2,4-pyrimidinediamine (R926594)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 6-aminoindole were reacted to yield N2,N4-bis(indol-6-yl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 22.39 min.; purity: 85%; MS (m/e): 359 (MH^+).

7.3.72 N2,N4-Bis(2-methoxycarbonyl benzofuran-5-yl)-5-fluoro-2,4-pyrimidinediamine (R926604)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to yield N2,N4-bis(2-methoxycarbonyl benzofuran-5-yl))-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 10.3 (bs, 1H), 10.05 (bs, 1H), 8.25 (d, 1H, J= 5.4 Hz), 8.06 (s, 1H), 7.94 (s, 1H), 7.77-7.49 (m, 5H), 7.36 (bs, 1H), 3.89 (s, 3H), 3.87 (s, 3H).

7.3.73 N2,N4-Bis[4-(methoxycarbonylmethyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926605)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and ethyl 4-aminophenyl acetate were reacted to yield N2,N4-bis[4-(methoxycarbonylmethyl)phenyl]-5-fluoro-2,4-pyrimidinediamine. The cross esterification reaction of ethyl ester to obtain the corresponding methyl ester was observed. ^1H NMR ($CDCl_3$): δ 10.62 (s, 1H), 8.06 (s, 1H), 7.69 (d, 1H, J= 4.5 Hz), 7.53 (d, 2H, J= 8.1 Hz), 7.43 (d, 2H, J= 8.7 Hz), 7.30 (d, 2H, J= 8.4 Hz), 7.20 (d, 2H, J= 8.4 Hz), 3.73 (s, 3H), 3.72 (s, 3H), 3.67 (s, 2H), 3.63 (s, 2H).

7.3.74 N2,N4-Bis(2-ethoxycarbonylindol-5-yl)-5-fluoro-2,4-pyrimidinediamine (R926616)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-ethoxycarbonyl-5-indoleamine were reacted to yield N2,N4-bis(2-ethoxycarbonylindol-5-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 11.83 (s, 1H), 11.63 (s, 1H), 9.21 (s, 1H), 8.99 (s, 1H), 8.08 (s, 1H), 8.01 (m, 2H), 7.49-7.22 (m, 4H), 6.92 (s, 1H), 6.63 (s, 1H), 4.29 (q, 4H, J= 7.2 Hz), 1.32 (m, 6H); LCMS: ret. time: 24.74 min.; purity: 99%; MS (m/e): 503 (MH^+).

7.3.75 N2,N4-Bis(coumarin-6-yl)-5-fluoro-2,4-pyrimidinediamine (R926617)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 6-aminocoumarin were reacted to yield N2,N4-bis(coumarin-6-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.17 (d, 2H, J= 3.6 Hz), 7.97-7.74 (m, 5H), 7.40 (1H, d, J= 8.7 Hz), 7.30 (d, 1H, J= 9Hz), 6.50 (d, 1H, J= 10.2 Hz), 6.40 (d, 1H, J= 9.3 Hz); LCMS: ret. time: 19.05 min.; purity: 94%; MS (m/e): 417 (MH^+).

7.3.76 N2,N4-Bis(4-methoxymethyl)coumarin-7-yl)-5-fluoro-2,4-pyrimidinediamine (R926620)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 7-amino-4-methoxymethylcoumarin were reacted to yield N2,N4-bis(coumarin-7-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.38 (s, 1H), 8.42 (d, 1H, J= 3 Hz), 8.28 (m, 1H), 8.05-7.93 (m, 2H), 7.77-7.50 (m, 4H), 6.31 (s, 1H), 6.29 (s, 1H), 4.66 (s, 2H), 4.65 (s, 2H), 3.43 (s, 3H), 3,41 (s, 3H); LCMS: MS (m/e): 505 (MH^+).

7.3.77 N2,N4-Bis(3-(hydroxymethyl)phenyl)-5-fluoro-2,4-pyrimidinediamine (R925757)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-aminobenzylalcohol were reacted to yield N2,N4-bis(3-(hydroxymethyl)phenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.90 (d, 1H, J= 3.3 Hz), 7.71 (m, 1H), 7.61 (d, 1H, J= 6.9 Hz), 7.50 (d,

1H, J= 6.0), 7.47 (s, 1H), 7.31 (t, 1H, J= 8.1 Hz), 7.22 (t, 1H, J= 8.1 Hz), 7.10 (d, 1H, J= 6.9), 6.97 (d, 1H, J= 7.5 Hz), 4.63 (s, 4H); LCMS: ret. time: 15.36 min.; purity: 100%; MS (m/e): 342 (MH^+).

7.3.78 N2,N4-Bis[(2R)-hydroxy-(1S)-methyl-2-phenylethyl]-5-fluoro-2,4-pyrimidinediamine (R925767)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and (1R,2S)-(-)-norephedrine were reacted to yield N2,N4-bis[(2R)-hydroxy-(1S)-methyl-2-phenylethyl]-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (acetone-d_6): δ 7.67 (s, 1H), 7.49-7.42 (m, 4H), 7.38-7.19 (m, 6H), 6.09 (d, 1H, J= 9.0 Hz), 5.73 (d, 1H, J= 7.5 Hz), 5.61 (d, 1H, J= 9.3 Hz), 5.04 (d, 1H, J= 3.6 Hz), 4.97 (d, 1H, J= 2.7 Hz), 4.74 (bs, 1H), 4.48 (bs, 1H), 4.30-4.25 (m, 1H), 1.09 (d, 1H, J= 6.9 Hz), 1.03 (d, 1H, J= 6.6 Hz); LCMS: ret. time: 21.56 min.; purity: 98%; MS (m/e): 397(MH^+).

7.3.79 N2,N4-Bis(2-hydroxy-2-phenylethyl)-5-fluoro-2,4-pyrimidinediamine (R925768)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-amino-1-phenylethanol were reacted to yield N2,N4-bis(2-hydroxy-2-phenylethyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (acetone-d_6): δ 8.15 (s, 1H), 7.46-7.22 (m, 10H), 5.01 (dd, 1H), 4.91 (dd, 1H), 4.78 (dd, 1H), 3.86-3.18 (m, 5H); LCMS: ret. time: 19.64 min.; purity: 89 %; MS (m/e): 369 (MH^+).

7.3.80 N2,N4-Bis(furfuryl)-5-fluoro-2,4-pyrimidinediamine (R925769)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and furfurylamine were reaeted to yield N2,N4-bis(furfuryl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.72 (bs, 1H), 7.38 (dd, 2H, J= 1.8 and 7.5 Hz), 6.34-6.30 (m, 2H), 6.22 (dd, 2H, J= 2.4 and 9.9 Hz), 5.163 (bs, 2H), 4.63 (d, 2H, J= 6.0), 4.54 (d, 2H, J= 6.0).; ^{19}F NMR ($CDCl_3$): - 48621; LCMS: ret. time: 97.27min.; purity: 97%; MS (m/e): 289 (MH^+).

7.3.81 N2,N4-Bis(piperonyl)-5-fluoro-2,4-pyrimidineamine (R925770)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and piperonylamine were reacted to yield N2,N4-bis(piperonyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.60 (bs, 1H), 6.78-6.69 (m, 6H), 5.93 (s, 2H), 5.91 (s, 2H), 4.51 (d, 2H, J= 5.7 Hz), 4.43 (d, 2H, J= 5.1 Hz); ^{19}F NMR ($CDCl_3$): - 45257; LCMS: ret. time: 22.06 min.; purity: 96%; MS (m/e): 397 (MH^+).

7.3.82 N2,N4-Dibenzyl-5-fluoro-2,4-pyrimidinediamine (R925772)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and benzylamine were reacted to yield N2,N4-bis(benzyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.69 (bs, 1H), 7.35-7.24 (m, 10H), 5.63 (bs, 1H), 5.27 (bs, 1H), 4.61 (d, 2H, J= 6.0 Hz), 4.55 (d, 2H, J= 6.0 Hz); ^{19}F NMR ($CDCl_3$): - 48580; LCMS: ret. time: 23.73 min.; purity: 100%; MS (m/e): 309 (MH^+).

7.3.83 N2,N4-Bis(3,4-methylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R925776)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3,4-methylenedioxyaniline were reacted to yield N2,N4-bis(3,4-methylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.86 (bs, 1H), 7.27 (m, 1H), 7.19 (m, 1H), 6.89 (dd, 2H, J= 2.1 and 8.1 Hz), 6.80 (dd, 2H, J= 1.8 and 8.1 Hz), 6.73 (t, 2H, J= 8.1 Hz), 5.97 (s, 2H), 5.92 (s, 2H); ^{19}F NMR ($CDCl_3$): - 47591; LCMS: ret. time: 21.74 min.; purity: 97%; MS (m/e): 369 (MH^+).

7.3.84 N2,N4-Bis[2-(4-hydroxyphenyl)ethyl]-5-fluoro-2,4-pyrimidinediamine (R925791)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and tyramine were reacted to yield N2,N4-bis[2-(4-hydroxyphenyl)ethyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.17 (bs, 1H), 8.22 (bs, 1H), 6.99 (d, 4H, J= 8.1 Hz), 6.65 (d, 4H, J= 8.1 Hz), 3.48-3.43 (m, 4H), 2.72 (t, 4H, J= 7.7 Hz); LCMS: ret. time: 19.19 min.; purity: 100 %; MS (m/e): 369 (MH^+).

7.3.85 N2,N4-Bis(4-cyanophenyl)-5-fluoro-2,4-pyrimidinediamine (R945057)

In like manner to the preparation of N2,N-4-bis(3-hydroxyphenyl)-5-fluoro-4-pyrimidineamine, 4-aminobenzonitrile and 2,4-dichloro-5-fluoropyrimidine gave N2,N4-bis(4-cyanophenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 7.26 (d, J= 8.7 Hz, 2 H), 7.36 (d, J= 9.0 Hz, 2 H), 7.43 (d, J= 8.7 Hz, 2 H), 7.60 (d, J= 8.7 Hz, 2 H), 7.86 (d, J= 3.6 Hz, 1 H), 9.49 (br, 1 H, NH), 9.51 (br, 1 H, NH); ^{19}F NMR (282 MHz, DMSO-d6): δ - 161.48; LC: 27.15 min.; 100%; MS (m/e): 331.00 (MH^+).

7.3.86 N2,N4-Bis(4-ethylphenyl)-5-fluoro-2,4-pyrimidinediamine (R926234)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-ethylaniline were reacted to yield N2,N4-bis(4-ethylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.83 (bs, 1H), 7.77 (d, 1H. J= 3.9 Hz), 7.48 (d, 2H, J= 8.7 Hz), 7.40 (d, 2H, J= 8.7 Hz), 7.31 (bs, 1H), 7.18 (d, 2H, J= 8.7 Hz), 7.11 (d, 2H, J= 8.7 Hz), 2.68-2.61 (m, 4H), 1.28-1.21 (m, 6H); LCMS: ret. time: 29.17 min.; purity: 100 %; MS (m/e): 337(MH^+).

7.3.87 N2,N4-Bis(3-chloro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926675)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-chloro-4-hydroxyaniline were reacted to yield N2,N4-bis(3-chloro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.83 (d, 1H, J= 4.2 Hz), 7.59 (d, 1H, J= 2.4 Hz), 7.53 (d, 1H, J= 2.4 Hz), 7.40 (dd, 1H, J= 2.4 and 8.7 Hz), 7.20 (dd, 1H, J= 2.4 and 8.7 Hz), 6.89 (d, 1H, J= 8.7 Hz), 6.81 (d, 1H, J= 8.7 Hz); ^{19}F NMR (CD_3OD): - 47862; LCMS: ret. time: 17.89 min.; purity: 99 %; MS (m/e): 382 (MH^+).

7.3.88 N2,N4-Bis[3-chloro-4-(ethoxycarbonylmethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (R926676)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-chloro-4-(ethoxycarbonylmethyleneoxy)aniline were reacted to yield N2,N4-bis[3-chloro-4-(ethoxycarbonylmethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.93 (bs, 1H), 7.67-7.65 (m, 2H), 7.41 (dd, 1H, J= 3.0 and 9.3 Hz), 7.26 (dd, 1H, J= 2.7

and 9.3 Hz), 6.92-6.85 (m, 3H), 6.69 (d, 1H, J= 2.4 Hz), 4.71 (s, 2H), 4.66 (s, 2H), 4.32-4.23 (m, 4H), 1.33-1.27 (m, 6H); ^{19}F NMR ($CDCl_3$): - 47274; LCMS: ret. time: 27.51 min.; purity: 97 %; MS (m/e): 553 (M^+).

7.3.89 N2,N4-Bis(3-fluoro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926681)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-fluoro-4-hydroxyaniline were reacted to yield N2,N4-bis(3-fluoro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.83 (d, 1H), 7.53 (dd, 1H), 7.42 (dd, 1H), 7.22 (dq, 1H), 7.03 (dq, 1H), 6.89 (d, 1H), 6.83 (s, 1H), 6.80 (s, 1H), 6.78 (d, 1H); ^{19}F NMR ($CDCl_3$): - 390060, - 39165, - 47835; LCMS: ret. time: 15.27 min.; purity: 95 %; MS (m/e): 349 (MH^+).

7.3.90 N2,N4-Bis(3-acetamidophenyl)-5-fluoro-2,4-pyrimidinediamine (R926682)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-aminoacetanilide were reacted to yield N2,N4-bis(3-acetamidophenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.24 (bs, 1H), 10.03 (s, 1H), 9.94 (s, 1H), 8.20 (d, 1H, J= 4.8 Hz), 7.91 (bs, 1H), 7.68 (bs, 1H), 7.43 (d, 1H, J= 8.1 Hz), 7.35-7.30 (m, 2H), 7.24-7.19 (m, 2H), 7.11 (t, 1H, J= 8.1 Hz), 2.03 (s, 3H), 2.01 (s, 3H); LCMS: ret. time: 15.10 min.; purity: 99 %; MS (m/e): 395 (MH^+).

7.3.91 N2,N4-Bis(2-fluoro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926683)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-fluoro-4-hydroxyaniline were reacted to yield N2,N4-bis(2-fluoro-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.78 (s, 1H), 9.50 (s, 1H), 8.75 (s, 1H), 8.06 (s, 1H), 7.87 (d, 1H, J= 4.2 Hz), 7.25-7.18 (m, 2H), 6.61 (dd, 1H, J= 2.4 and 12.3 Hz), 6.56-6.47 (m, 2H), 6.39 (dd, 1H, J= 1.8 and 8.7 Hz); LCMS: ret. time: 15.52 min.; purity: 99 %; MS (m/e): 349 (MH^+).

7.3.92 N2,N4-Bis(4-isopropoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926701)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-isopropoxyaniline were reacted to yield N2,N4-bis(4-isopropoxy)phenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.89 (bs, 1H), 7.47 (d, 2H, J= 8.7 Hz), 7.38 (d, 2H, J= 9.0 Hz), 6.87 (d, 2H, J= 9.0 Hz), 6.83 (d, 2H, J= 8.7 Hz); LCMS: ret. time: 27.51 min.; purity: 98 %; MS (m/e): 397 (MH^+).

7.3.93 N2,N4-Bis(3,4-ethylenedioxyphenyl)-5-bromo-2,4-pyrimidinediamine (R925771)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and 3,4-ethylenedioxyaniline were reacted to yield N2,N4-bis(3,4-ethylenedioxyphenyl)-5-bromo-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.07 (bs, 1H), 7.16 (d, 1H, J= 3.0 Hz), 7.10 (d, 1H, J= 2.7 Hz), 6.98-6.93 (m, 2H), 6.90-6.75 (m, 3H), 4.28-4.21 (m, 8H); LCMS: ret. time: 22.61 min.; purity: 100%; MS (m/e): 458 (MH^+).

7.3.94 N2,N4-Bis(3-hydroxyphenyl)-5-bromo-2,4-pyrimidinediamine (R925778)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and 3-aminophenol were reacted to yield N2,N4-bis(3-hydroxyphenyl)-5-bromo-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.99 (bs, 1H), 9.34 (bs, 1H), 8.30 (s, 1H), 7.15 (t, 1H, J= 8.4 Hz), 7.06-6.97 (m, 2H), 6.94-6.92 (m, 2H), 6.80 (bs, 1H), 6.62 (s, 1H, J= 8.1 Hz), 6.43 (d, 1H, J= 7.8 Hz); LCMS: ret. time: 18.48 min.; purity: 97%; MS (m/e): 374 (MH^+).

7.3.95 N2,N4-Bis[4-(ethoxycarbonylmethyleneoxy)phenyl]-5-bromo-2,4-pyrimidinediamine (R925779)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and ethyl 4-aminophenoxyacetate were reacted to yield N2,N4-bis[4-(ethoxycarbonylmethyleneoxy)phenyl]-5-bromo-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.12 (s, 1H), 8.48 (s, 1H), 8.11 (s, 1H), 7.42 (d, 4H, J= 8.7 Hz), 6.89 (d, 2H, J= 9.0 Hz), 6.71 (d, 2H, J= 9.3 Hz), 4.78 (s, 2H), 4.66 (s.

2H), 4.20-4.10 (m, 4H), 1.23-1.16 (m, 6H); LCMS: ret. time: 25.82 min.; purity: 94%; MS (m/e): 546 (MH^+).

7.3.96 N2,N4-Bis[2-(4-hydroxyphenyl)ethyl]-5-bromo-2,4-pyrimidinediamine (R925792)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and tyramine were reacted to yield N2,N4-bis[2-(4-hydroxyphenyl)ethyl]-5-bromo-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 7.83 (s, 1H), 6.96 (d, 4H, J= 8.1 Hz), 6.63 (d, 4H, J= 8.1 Hz), 3.54-3.42 (m, 2H), 2.74-2.66 (m, 2H), 2.74-2.66 (m, 4H); ret. time: 20.10 min.; purity: 100 %; MS (m/e): 430 (MH^+).

7.3.97 N2,N4-Bis(2-phenylphenyl)-5-bromo-2,4-pyrimidinediamine (R925798)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and 2-aminobiphenyl were reacted to yield N2,N4-bis(2-phenylphenyl)-5-bromo-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 8.34 (d, 1H, J= 8.1 Hz), 8.27 (d, 1H, J= 8.1 Hz), 8.00 (s, 1H), 7.51-7.18 (m, 17H), 6.95 (s, 1H); LCMS: ret. time: 18.87 min.; purity: 97 %; MS (m/e): 495 (MH^+).

7.3.98 N2,N4-Bis(2-methoxy-5-phenylphenyl)-5-bromo-2,4-pyrimidinediamine (R925799)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and 5-phenyl-*ortho*-anisidine were reacted to yield N2,N4-bis(2-methoxy-5-phenylphenyl)-5-bromo-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 8.26 (m, 2H), 8.05 (m, 2H), 7.39-7.21 (m, 12H), 7.17 (dd, 1H, J= 2.4 and 8.1 Hz), 7.11 (d, 1H, J= 8.7 Hz), 7.05 (d, 1H, J= 9.0 Hz), 3.88 (s, 3H), 3.83 (s, 3H); LCMS: ret. time: 20.51 min.; purity: 98 %; MS (m/e): 554 (MH^+).

7.3.99 N2,N4-Bis(4-methoxy-3-phenylphenyl)-5-bromo-2,4-pyrimidinediamine (R925802)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, with the addition of triethylamine, 5-bromo-2,4-dichloropyrimidine and 3-phenyl-*para*-anisidine hydrochloride were reacted to yield N2,N4-bis(4-methoxy-3-phenylphenyl)-5-bromo-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 8.26 (m, 2H),

8.06 (m, 2H), 7.38-7.25 (m, 12H), 7.18 (dd, 1H, J= 2.4 and 8.1 Hz), 7.12 (d, 1H, J= 8.7 Hz), 7.05 (d, 1H, 8.7 Hz), 3.89 (s, 3H), 3.83 (s, 3H); LCMS: ret. time: 36.77 min.; purity: 98 %; MS (m/e): 554 (MH^+).

7.3.100 N2,N4-Bis(3-phenylphenyl)-5-bromo-2,4-pyrimidinediamine (R925803)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-bromo-2,4-dichloropyrimidine and 3-aminobiphenyl were reacted to yield N2,N4-bis(3-phenylphenyl)-5-bromo-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.86 (bs, 1H), 9.20 (bs 1H), 8.33 (s, 1H), 7.79 (bs, 1H), 7.18 (bs, 1H), 7.61 (d, 1H), 7.56-7.51 (m, 2H), 7.48-7.23 (m, 11H), 7.17-7.04 (m, 2H); LCMS: ret. time: 19.52 min.; purity: 80 %; MS (m/e): 494 (MH^+).

7.3.101 N2,N4-Bis(3,4-ethylenedioxyphenyl)-5-cyano-2,4-pyrimidinediamine (R925773)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and 3,4-ethylenedioxyaniline were reacted to yield N2,N4-bis(3,4-ethylenedioxyphenyl)-5-cyano-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.69 (bs, 1H), 9.28 (bs, 1H), 8.40 (s, 1H), 7.16-6.89 (m, 4H), 6.79 (d, 1H, J= 9.0 Hz), 6.65 (bs, 1H), 4.22 (s, 4H), 4.16 (s, 4H); LCMS: ret. time: 24.42 min.; purity: 93 %; MS (m/e): 404 (MH^+).

7.3.102 N2,N4-Bis(3-hydroxyphenyl)-5-cyano-2,4-pyrimidinediamine (R925774)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and 3-hydroxyaniline were reacted to yield N2,N4-bis(3-hydroxyphenyl-5-cyano-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.73 (bs, 1H), 9.40 (s, 1H), 9.33 (bs, 1H), 9.24 (s, 1H), 8.47 (s, 1H), 7.20 (d, 1H, J= 7.5 Hz), 7.11 (t, 1H, J= 7.5 Hz), 7.09-7.02 (m, 2H), 6.99-6.89 (m, 3H), 6.54 (d, 1H, J= 7.2 Hz), 6.37 (dd, 1H, J= 1.8 and 8.4 Hz); LCMS: ret. time: 19.71 min.; purity: 97%; MS (m/e): 320 (MH^+).

7.3.103 N2,N4-Bis[4-(ethoxycarbonylmethyleneoxy)phenyl]-5-cyano-2,4-pyrimidinediamine (R925775)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and ethyl 4-aminophenoxyacetatewere reacted to yield N2,N4-bis[4-(ethoxycarbonylmethyleneoxy)phenyl]-5-cyano-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.80 (s, 1H), 7.40 (d, 4H, J= 8.7 Hz), 6.90 (4H, J= 9.0 Hz), 6.82-6.75 (m, 2H). 4.60 (bs, 4H), 4.29-4.25 (m, 4H), 1.32-1.26 (m, 5H), LCMS: ret. time: 28.50 min.; purity: 100 %; MS (m/e): 493 (MH^+).

7.3.104 R935192: N2, N4-Bis(1-methyl-indazolin-5-yl)-5-fluoro-2,4-pyrimidinediamine:

In like manner to the preparation of N2, N4-bis (3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoropyrimidine and 1-methyl-5-aminoindazole were reacted to produce N2, N4-bis(1-methyl-indazolin-5-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.65 (s, 1H), 10.41 (s, 1H), 8.29 (d, 1H, J= 5.3 Hz), 7.98 (s, 1H), 7.79 (d, 2H, J= 9.4 Hz), 7.69-7.54 (m, 4H), 7.35 (dd, 1H, J= 1.7 and 9.4 Hz), 4.03 (s, 3H), 4.01 (s, 3H). LCMS: ret. time: 16.86 min.; purity: 99%; MS (*m/e*): 389 (MH^+).

7.3.105 R935205: N2, N4-Bis[1-(methoxycarbonyl)methyl-indazoline-6-yl]-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N2, N4-bis (3-hydroxyphenyl)-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrmidine and 6-amino-1-(methoxycarbonyl)methyl-indazoline were reacted to produce N2, N4-bis[1-(methoxycarbonyl)methyl-indazoline-6-yl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.59 (s, 1H), 9.45 (s, 1H), 8.18 (d, 1H, J= 3.5 Hz), 8.11 (s, 1H), 8.04 (s, 1H), 7.95 (s, 1H), 7.93 (s, 1H), 7.69 (d, 1H, J= 8.8 Hz), 7.58 (d, 1H, J= 8.8 Hz), 7.48 (dd, 1H, J= 1.7 and 8.8 Hz), 7.32 (d, 1H, J= 8.8 Hz), 5.17 (s, 2H), 4.88 (s, 1H), 3.58 (s, 3H), 3.58 (s, 3H). LCMS: ret. time: 17.80 min.; purity: 99%; MS (*m/e*): 505 (MH^+).

7.3.106 R935211: N2, N4-Bis[1-(methoxycarbonyl)methyl-indazoline-5-yl]-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrmidine and 6-amino-1-(methoxycarbonyl)methyl-indazoline was reacted to produce N2, N4-bis[1-(methoxycarbonyl)methyl-indazoline-6-yl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR

(DMSO-d6): δ 9.37 (s, 1H), 9.17 (s, 1H), 8.11-8.06 (m, 3H), 7.94 (s, 1H), 7.70 (s, 1H), 7.63 (s, 2H), 7.46 (s, 2H), 5.40 (s, 2H), 5.31 (s, 2H), 3.67 (s, 3H), 3.64 (s, 3H). LCMS: ret. time: 17.06 min.; purity: 96%; MS (*m/e*): 505 (MH^+).

7.3.107 R935188: N2,N4-Bis(indazolin-6-yl)-5-fluoro-2,4-pyrimidinediamine:

In like manner to the preparation of 5-fluoro-N2, N4-bis (3-hydroxyphenyl)-2,4-pyrimidinediamine, 2,4-dichlro-5-fluoropyrimidine and 6-aminoindazoline were reacted to produce N2,N4-bis(indazolin-6-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.80 (s, 1H), 9.65 (s, 1H), 8.20 (d, 1H, J= 4.1 Hz), 8.01 (s, 1H), 7.96 (s, 1H), 7.93 (s, 1H), 7.89 (s, 1H), 7.69 (d, 1H, J= 8.8 Hz), 7.57 (d, 1H, J= 8.3 Hz), 7.54 (dd, 1H, J= 1.7 and 8.8 Hz), 7.29 (dd, 1H, J= 1.7 and 8.8 Hz); LCMS: ret. time:15.17 min.; purity: 94%; MS (*m/e*): 361 (MH^+).

7.3.108 R935189: N2, N4-Bis(indazolin-5-yl)-5-fluoro-2,4-pyrimidinediamine:

In like manner to the preparation of N2, N4-bis (3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 5-aminoindazole were reacted to produce N2, N4-bis(indazolin-5-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.05 (s, 1H), 9.76 (s, 1H), 8.16 (d, 1H, J= 4.7 Hz), 8.05 (s, 1H), 7.92 (s, 1H), 7.82 (s, 1H), 7.68 (s, 1H), 7.52-7.52 (m, 2H), 7.44 (d, 1H, J= 8.8 Hz), 7.34 (dd, 1H, J= 1.7 and 8.8 Hz); LCMS: ret. time: 14.33 min.; purity: 100%; MS (*m/e*): 361 (MH^+).

7.3.109 N2,N4-Bis(1-ethoxycarbonyl-2-methylpropyl)-5-cyano-2,4-pyrimidinediamine (R925814)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and valine ethyl ester were reacted to yield N2,N4-bis(1-ethoxycarbonyl-2-methylpropyl)-5-cyano-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.15 (s, 1H), 6.10 (d, 1H, J= 8.4 Hz), 5.67 (d, 1H, J= 8.1 Hz), 4.66-4.62 (m, 1H), 4.50-4.46 (m, 1H), 4.25-4.13 (m, 4H), 2.27-2.14 (m, 2H), 1.31-1.24 (m, 6H), 1.00-0.94 (m, 12H); LCMS: ret. time: 30.41 min.; purity: 98 %; MS (m/e): 392 (MH^+).

7.3.110 N2,N4-Bis(1-methoxycarbonyl-3-methylbutyl)-5-cyano-2,4-pyrimidinediamine (R925815)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and leucine methyl ester were reacted to yield N2,N4-bis(1-methoxycarbonyl-3-methylbutyl)-5-cyano-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): mixture of rotamers δ 8.15 (s, 1H), 6.10 and 5.49 (2d, 1H, J= 8.1 Hz), 5.53 (d, 1H, J= 8.4 Hz), 4.80-4.67 (m, 1H), 4.57-4.48 (m, 1H), 3.73 (s, 3H), 3.71 (s, 3H), 1.78-1.60 (m, 6H), 0.97-0.89 (m, 12H); LCMS: ret. time: 30.33 min.; purity: 91 %; MS (m/e): 392 (MH^+).

7.3.111 N2,N4-Bis(methoxycarbonylbenzyl)-5-cyano-2,4-pyrimidinediamine (R925819)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and phenyl glycine methyl ester were reacted to yield N2,N4-bis(methoxycarbonylbenzyl)-5-cyano-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): mixture of rotamers δ 8.15 (s, 1H), 7.69-7.60 (m, 1H), 7.42-7.32 (m, 10H), 6.20 and 5.73 (2d, 1H, J= 6.6 Hz), 6.14 and 5.65 (2d, 1H, J= 6.3 Hz), 5.55 (d, 1H, J= 6.3 Hz), 5.39 (t, 1H, J= 7.2 Hz), 3.79 and 3.78 (2s, 3H), 3.67 and 3.65 (2s, 3H); LCMS: ret. time: 30.22 min.; purity: 91 %; MS (m/e): 432 (MH^+).

7.3.112 N2,N4-Bis[4-(ethoxycarbonylmethyl)phenyl]-5-cyano-2,4-pyrimidinediamine (R926662)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-cyanopyrimidine and ethyl 4-aminophenylacetate were reacted to yield N2,N4-bis[4-(ethoxycarbonylmethyl)phenyl]-5-cyano-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.29 (bs, 1H), 7.46 (2d, 4H, J= 7.8 Hz), 7.28 (d, 2h, J= 8.1 Hz), 7.19 (d, 2H, J= 8.1 Hz), 4.16 (2q, 4H, J= 6.3 Hz), 3.64 (s, 2H), 3.59 (s, 2H), 1.30-1.23 (m, 6H); LCMS: ret. time: 29.29 min.; purity: 93%; MS (m/e): 461 (MH^+).

7.3.113 R935000: N2,N4-Bis(2-methoxy-5-phenylphenyl)-5-methyl-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N2,N4-bis(3-hydroxyphenyl)-2,4-pyrimidinediamine, 5-phenyl-2-anisidine and 2,4-dichloro-5-methylpyrimidine were reacted to provide N2,N4-bis(2-methoxy-5-phenylphenyl)-5-methyl-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$ + CD_3OD): δ 7.76 (d, 1H, J= 2.3 Hz), 7.57 (s, 1H), 7.56 (s, 1H), 7.02-6.85

(m, 8H), 6.86-6.80 (m, 4H), 6.72 (d, 2H), 3.73 (s, 3H), 3.72 (s, 3H), 2.07 (s, 3H); LCMS: ret. time: 31.53 min.; purity: 97%; MS (*m/e*): 489 (MH^+).

7.3.114 R935001: N2,N4-Bis[(2-methyl-5-phenyl)phenyl]-5-methyl-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-phenyl-2-toluidine and 2,4-dichloro-5-methylpyrimidine were reacted to produce N2,N4-bis[(2-methyl-5-phenyl)phenyl]-5-methyl-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.59-7.55 (m, 1H), 7.45 (d, 2H, J= 3.6 Hz), 7.26-7.17 (m, 6H), 7.09-6.98 (m, 8H), 2.36 (s, 3H), 2.22 (s, 3H), 2.21(s, 3H); LCMS: ret. time: 32.44 min.; purity: 90%; MS (*m/e*): 457 (MH^+).

7.3.115 R935002: N2,N4-Bis[(4-methoxy-3-phenyl)phenyl]-5-methyl-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 3-phenyl-4-anisidine hydrochloride and 2,4-dichloro-5-methylpyrimidine with an added diisopropylethylamine were reacted to produce N2,N4-bis[(4-methoxy-3-phenyl)phenyl]-5-methyl-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 8.15 (d, 1H, J= 2.3 Hz), 7.76 (t, 1H, J= 2.3 Hz), 7.71 (s, 1 H), 7.59 (s, 1H), 7.16 –7.03 (m, 8H), 6.98-6.81 (5H), 3.96 (s, 3H), 3.89 (s, 3H), 2.21 (s, 3H); LCMS: ret. time: 32.01 min.; purity: 90%; MS (*m/e*): 489 (MH^+).

7.3.116 R935003: N2,N4-Bis[(4-phenyl-2-methoxy-5-methyl)phenyl]-5-methyl-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 5-methyl-4-phenyl-2-anisidine and 2,4-dichloro-5-methylpyrimidine were reacted to produce N2,N4-bis[(4-phenyl-2-methoxy-5-methyl)phenyl]-5-methyl-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 9.25 (br s, 1H), 8.17 (s, 1H), 7.77 (t, 1H, J= 6.4 Hz), 7.66 (s, 2H), 7.43-7.25 (m, 10H), 6.79 (s, 2H), 3.91 (s, 3H), 3.85 (s, 3H), 2.20 (s, 3H), 2.09 (s, 3H), 2.02 (s, 3H); LCMS: ret. time: 31.10 min.; purity: 100%; MS (*m/e*): 517 (MH^+).

7.3.117 R935004: N2,N4-Bis[[di-(4-methoxyphenyl)]methyl]-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 1,1-di(4-anisyl)methylamine and 2,4-diehloro-5-fluoropyrimidine were reacted to produce N2,N4-bis[[di-(4-methoxyphenyl)]methyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$ + CD_3OD): δ 7.91 (d, 1H, J= 2.3 Hz), 7.18 (d, 8H, J= 9.0 Hz), 6.85 (d, 8H, J= 9.0 Hz), 6.40 (d, 1H, J= 8.2 Hz), 5.39 (d, 1H, J= 7.1 Hz), 3.81 (s, 6H), 3.78 (s, 6H); LCMS: ret. time: 32.76 min.; purity: 95%; MS (*m/e*): 581 (MH^+).

7.3.118 R935005: N2,N4-Bis(diphenylmethyl)-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 1,1-diphenyl methylamine and 2,4-dichloro-5-fluoropyrimidine were reacted to produce N2, N4-bis(diphenylmethyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.91 (d, 1H, J= 2.3 Hz), 7.39-7.25 (m, 20H), 6.51 (d, 1H, J= 8.2 Hz), 5.77 (d, 1H, J= 7.0 Hz); LCMS: ret. time: 33.46 min.; purity: 92%; MS (*m/e*): 461 (MH^+).

7.3.119 R935006: N2,N4-Bis[di-(4-chlorophenyl)methyl]-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, benzhydrylamine and 2,4-dichloro-5-fluoropyrimidine were reacted to yield N2,N4-bis[di-(4-chlorophenyl)methyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$ + CD_3OD): δ 7.94 (d, 1H, J= 2.3 Hz), 7.40-7.20 (m, 16H), 6.46 (d, 1H, J= 8.2 Hz), 5.69 (d, 1H, J= 7.0 Hz); LCMS: ret. time: 32.83 min.; purity: 90%; MS (*m/e*): 599 (MH^+).

7.3.120 R935016: N2,N4-Bis[1(*R*)-4-methoxyphenylethyl]-5-bromo-2,4-pyrimidineamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, (R)-(+)-1-(4-methoxyphenyl)ethylamine and 5-bromo-2,4-dichloropyrimidine were reacted to produce N2,N4-bis[1(*R*)-4-methoxyphenylethyl]-5-bromo-2,4-pyrimidineamine. ^{1}H NMR ($CDCl_3$): δ 7.81 (s, 1H), 7.25 (d, 4H, J= 8.4 Hz), 6.86 (app t, 4H, J= 8.4 and 8.7 Hz), 5.27-5.20 m (2H), 5.09 (dq, 1H, J= 6.4 and 7.0 Hz), 4.89 (dq, 1H, J= 6.4 and 7.0 Hz), 3.80 (s, 3H), 3.79 (s, 3H), 1.40 (d, 6H, J= 7.0 Hz).

7.3.121 R935075: N2, N4-Bis[3-(2-hydroxyethoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-(3-aminophenoxy)ethanol were reacted to produce N2,N4-bis[3-(2-hydroxyethoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.50 (br s, 1H), 9.35 (br s, 1H), 8.13 (d, 1H, J= 4.1 Hz), 7.44 (d, 1H, J= 7.6 Hz), 7.26-7.19 (m, 4H), 7.10 (t, 1H, J= 7.6 Hz), 6.65 (dd, 1H, J= 2.3 and 8.2 Hz), 6.50 (dd, 1H, J= 2.3 and 8.2 Hz), 5.0 (br s, 2H), 3.91 (t, 2H, J= 5.2 Hz), 3.85 (t, 2H, J= 5.2 Hz), 3.68 (qt, 2H, J= 5.2 Hz), 3.66 (qt, 2H, J= 5.2 Hz); LCMS: ret. time: 15.76 min.; purity: 97%; MS (*m/e*): 401 (MH^+).

7.3.122 R935076: N2,N4-Bis[3-(2-methoxyethyl)oxyphenyl]-5-fluoro-2,4-pyrimidinediamine:

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-(2-methoxyethoxy)aniline were reacted to produce N2,N4-bis[3-(2-methoxyethyl)oxyphenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.96 (d, 1H, J= 2.9 Hz), 7.36 (t, 1H, J= 1.7 Hz), 7.28 (t, 1H J= 1.7 Hz), 7.25-7.06 (m, 4H), 6.98 (br s, 1H), 6.75 (d, 1H, J= 2.3 Hz), 6.70 (dd, 1H, J= 1.7 and 8.2 Hz), 6.58 (dd, 1H, J= 1.7 and 8.2 Hz), 4.08-4.03 (m, 4H), 3.74-3.69 (m, 4H), 3.44 (s, 3H), 3.43 (s, 3H); LCMS: ret. time: 21.01 min.; purity: 97%; MS (*m/e*): 429 (MH^+).

7.3.123 R935077: N2,N4-Bis(5-hydroxy-2-isopropylphenyl)-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 3-amino-4-isopropylphenol and 2,4-dichloro-5-fluoropyrimidine were reacted to produce N2,N4-bis(5-hydroxy-2-isopropylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.93 (d, 1H, J= 3.5 Hz), 7.79 (br s, 1H), 7.64 (br s, 1H), 7.13 (d, 1H, J= 8.7 Hz), 7.06 (d, 1H, J= 2.3 Hz), 7.05 (d, 1H, J= 8.7 Hz), 6.89 (d, 1H, J= 2.3 Hz), 6.66 (d, 1H, J= 2.3 and 8.7 Hz), 6.57 (d, 1H, J= 2.3 and 8.7 Hz), 2.96 (m, 2H), 1.25 (d, 6H, J= 7.0 Hz), 1.13 (dd, 6H, J= 7.0 Hz); LCMS: ret. time: 24.27 min.; purity: 97%; MS (*m/e*): 397 (MH^+).

7.3.124 R935114: N2,N4-Bis(3-methoxycarbonylmethylenephenyl)-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-(methoxycarbonylmethylene)aniline were reacted to produce the desired N2,N4-bis(3-methoxycarbonylmethylenephenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.23 (br s, 1H), 10.05 (br s, 1H), 8.26 (d, 1H, J= 4.6 Hz), 7.64 (d, 1H, J= 8.2 Hz), 7.51 (br s, 1H), 7.46 (d, 1H, J= 8.2 Hz), 7.33 (br s, 1H), 7.29 (t, 1H, J= 7.6 Hz), 7.20 (t, 1H, J= 7.6 Hz), 7.06 (d, 1H, J= 7.6 Hz), 6.93 (d, 1H, J= 7.6 Hz), 3.63 (s, 2H), 3.58 (s, 3H), 3.57 (s, 3H), 3.56 (s, 2H); LCMS: ret. time: 21.74 min.; purity: 92%; MS (*m/e*): 425 (MH^+).

7.3.125 R935162: N2, N4-Bis(3,4-propylenedioxyphenyl)- 5-fluoro-2,4-pyrimidinediamine:

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and (3,4-propylenedioxy)aniline were reacted to give N2,N4-bis(3,4-propylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.18 (s, 1H), 9.07 (s, 1H), 8.03 (d, 1H, J= 3.5 Hz), 7.38 (dd, 1H, J= 2.3 and 8.2 Hz), 7.35 (d, 1H, J= 2.3 Hz), 7.33 (d, 1H, J= 2.3 Hz), 7.18 (dd, 1H, J= 2.3 and 8.8 Hz), 6.90 (d, 1H, J= 8.8 Hz), 6.80 (d, 1H, J= 8.2 Hz), 4.11-3.98 (m, 8H), 2.09-2.01 (m, 4H); LCMS: ret. time: 21.40 min.; purity: 97%; MS (*m/e*): 425 (MH^+).

7.3.126 R935163: N2,N4-Bis(3-chloro-4-fluoropheny)-2,4-pyrimidinediamine:

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-chloro-4-fluoroaniline were reacted to produce N2, N4-bis(3-chloro-4-fluoropheny)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.58 (s, 1H), 9.48 (s, 1H), 8.17 (d, 1H, J= 4.1 Hz), 7.94-7.90 (m, 2H), 7.73-7.67 (m, 1H), 7.51-7.45 (m, 1H), 7.38 (t, 1H, J= 8.8 Hz), 7.26 (t, 1H, J= 8.8 Hz); LCMS: ret. time: 27.83 min.; purity: 99%; MS (*m/e*): 386 (MH^+).

7.3.127 N2,N4-Bis(3-hydroxyphenyl)-6-ethoxycarbonyl-5-nitro-2,4-pyrimidinediamine (R925849)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-6-ethoxycarbonyl-5-nitropyrimidine and 3-aminophenol were reacted to yield N2,N4-bis(3-hydroxyphenyl)-6-ethoxycarbonyl-5-nitro-2,4-

pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.56 (bs, 1H), 10.32 (bs, 1H), 9.54 (s, 1H), 9.32 (bs, 1H), 7.22-7.15 (m, 2H), 7.02-6.96 (m, 1H), 6.93-6.82 (m, 2H), 6.81-6.74 (m, 1H), 6.67 (d, 1H, J= 9.3 Hz), 6.43 (d, 1H, J= 8.1 Hz), 4.35 (q, 2H, J= 6.9 Hz), 1.30 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 26.01 min.; purity: 96 %; MS (m/e): 412 (MH^+).

7.3.128 N2,N4-Bis(3,4-ethylendioxyphenyl)-6-ethoxycarbonyl-5-nitro-2,4-pyrimidinediamine (R925852)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-6-ethoxycarbonyl-5-nitropyrimidine and 3,4-ethylenedioxyaniline were reacted to yield N2,N4-bis(3,4-ethylendioxyphenyl)-6-ethoxycarbonyl-5-nitro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.52 (s, 1H), 10.28 (s, 1H), 7.07-7.01 (m, 2H), 6.96 (dd, 1H, J= 1.8 and 8.7 Hz), 6.90-6.84 (m, 2H), 6.61 (d, 1H, J= 8.7 Hz), 4.33 (q, 2H, J= 6.9 Hz), 4.24 (s, 4H), 4.17 (s, 4H), 1.29 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 30.40 min.; purity: 100 %; MS (m/e): 496 (MH^+).

7.3.129 N2,N4-Bis(ethoxycarbonylmethyl)-6-ethoxycarbonyl-5-nitro-2,4-pyrimidinediamine (R925864)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, with the addition of triethylamine, 2,4-dichloro-6-ethoxycarbonyl-5-nitropyrimidine and glycine ethyl ester hydrochloride were reacted to yield N2,N4-bis(ethoxycarbonylmethyl)-6-ethoxycarbonyl-5-nitro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): mixture of rotamers δ 8.99 and 8.80 (2bs, 1H), 6.22 and 6.00 (2bs, 1H), 4.45 (t, 2H, J= 7.2 Hz), 4.31-4.21 (m, 6H), 4.14 (d, 2H, J= 5.1 Hz), 1.39 (t, 3H, J= 7.2 Hz), 1.34-1.28 (m, 6H); LCMS: ret. time: 26.06 min.; purity: 99 %; MS (m/e): 400 (MH^+).

7.3.130 N2,N4-Bis[2-(4-hydroxyphenyl)ethyl]-2,4-pyrimidinediamine (R925790)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and tyramine were reacted to yield N2,N4-bis[2-(4-hydroxyphenyl)ethyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 11.56 (bs, 1H), 9.23 (s, 1H), 8.89 (bs, 1H), 7.92 (bs, 1H), 7.60 (d, 1H, J= 6.9 Hz), 6.99 (d, 4H, J= 8.1 Hz), 6.65 (d, 4H, J= 8.1 Hz), 6.00 (d, 1H, J= 7.2 Hz), 3.59-3.42 (m, 4H), 2.76-2.67 (m, 4H); LCMS: ret. time: 17.93 min.; purity: 95 %; MS (m/e): 351 (MH^+).

7.3.131 N2,N4-Bis(2-phenylphenyl)-2,4-pyrimidinediamine (R925804)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 2-aminobiphenyl were reacted to yield N2,N4-bis(2-phenylphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.36 (d, 1H, J= 8.1 Hz), 7.97 (d, 1H, J= 5.7 Hz), 7.80 (d, 1H, J= 7.5 Hz), 7.50-7.21 (m, 15H), 7.12-7.05 (m, 1H), 6.91 (bs, 1H), 6.38 (bs, 1H), 6.07 (d, 1H, J= 6.0 Hz); LCMS: ret. time: 29.94 min.; purity: 100 %; MS (m/e): 415 (MH^+).

7.3.132 N2,N4-Bis(2-methoxy-5-phenylphenyl)-2,4-pyrimidinediamine (R925805)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 5-phenyl-*ortho*-anisidine were reacted to yield N2,N4-bis(2-methoxy-5-phenylphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.88-7.84 (m, 2H), 7.82 (d, 1H, J= 6.9 Hz), 7.30-7.14 (m, 14H), 7.10 (dd, 2H, J= 3.0 and 8.1 Hz), 6.48 (d, 1H, J= 6.9 Hz), 3.93 (s, 3H), 3.92 (s, 3H); LCMS: ret. time: 30.09 min.; purity: 94 %; MS (m/e): 476 (MH^+).

7.3.133 N2,N4-Bis(3-carboxy-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945041)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, from 5-amino-2-hydroxybenzoic acid (458 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis(3-carboxy-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (235 mg, 98%). ^{1}H NMR (DMSO-d6): δ 6.76 (d, J= 9.0 Hz, 1 H), 6.88 (d, J= 9.6 Hz, 1 H), 7.75 (dd, J= 3.0, 9.0 Hz, 1 H), 7.90-7.94 (m, 3 H), 8.02 (d, J= 3.9 Hz, 1 H), 9.04 (s, 1 H, NH), 9.28 (s, 1 H, NH); ^{19}F NMR (282 MHz, DMSO-d6): δ -165.79; LC: 16.02 min, 86.82%; MS (m/z): 400.94 (MH^+).

7.3.134 N2,N4-Bis(4-methoxy-3-phenylphenyl)-2,4-pyrimidinediamine (R925806)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, with the addition of triethylamine, 2,4-dichloropyrimidine and 3-phenyl-*para*-anisidine hydrochloride were reacted to yield N2,N4-bis(4-methoxy-3-phenylphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.93 (d, 1H, J= 2.4 Hz), 7.88 (d, 1H, J= 2.4 Hz), 7.29 (dd, 1H, J= 1.8 and 9.0 Hz), 7.26-7.18 (m, 13H), 7.10 (d, 2H, J= 8.7

Hz), 6.46 (d, 1H, J= 7.2 Hz), 3.93 (s, 3H), 3.92 (s, 3H); LCMS: ret. time: 29.99 min.; purity: 92%; MS (m/e): 476 (MH^+).

7.3.135 N2,N4-Bis(2-methyl-5-phenylphenyl)-2,4-pyrimidinediamine (R925807)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 5-phenyl-*ortho*-toluidine were reacted to yield N2,N4-bis(2-methyl-5-phenylphenyl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 10.45 (bs, 1H), 10.01 (bs, 1H), 7.86 (bs, 1H), 7.69-7.22 (m, 17H), 2.28 (s, 6H); LCMS: ret. time: 18.69 min.; purity: 98 %; MS (m/e): 443 (MH^+).

7.3.136 N2,N4-Bis(2-methoxy-5-methyl-4-phenylphenyl)-2,4-pyrimidinediamine (R925808)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 5-methyl-4-phenyl-*ortho*-anisidine were reacted to yield N2,N4-bis(2-methoxy-5-methyl-4-phenylphenyl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.99 (bs, 1H), 9.22 (bs, 1H), 7.98 (d, 1H, J= 6.3 Hz), 7.75 (s, 1H), 7.59 (s, 1H), 7.46-7.29 (m, 10H), 6.92 (s, 1H), 6.87 (s, 1H), 6.49 (d, 1H, J= 5.4 Hz), 3.82 (s, 3H), 3.81 (s, 3H), 2.07 (s, 3H), 1.98 (s, 3H); LCMS: ret. time: 19.69 min.; purity: 93 %; MS (m/e): 503 (MH^+).

7.3.137 N2,N4-Bis[4-(ethoxycarbonylmethyleneoxy)phenyl]-5-trifluoromethyl-2,4-pyrimidinediamine (R925862)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-trifluoromethylpyrimidine and ethyl 4-aminophenoxyacetate were reacted to yield N2,N4-bis[4-(ethoxycarbonylmethyleneoxy)phenyl]-5-trifluoromethyl-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.64 (bs, 1H), 8.80 (bs, 1H), 8.29 (s, 1H), 7.36 (d, 2H, J= 8.1 Hz), 7.31 (d, 2H, J= 9.3 Hz), 6.93 (d, 2H, J= 8.7 Hz), 6.70 (d, 2H, J= 9.0 Hz), 4.80 (s, 2H), 4.67 (s, 2H), 4.18 (q, 2H, J= 6.9 Hz), 4.15 (q, 2H, J= 6.9 Hz), 1.20 (t, 3H, J= 6.9 Hz), 1.19 (t, 3H, J= 6.9 Hz); ^{19}F NMR (DMSO-d6): -16932; LCMS: ret. time: 26.33 min.; purity: 98 %; MS (m/e): 535 (MH^+).

7.3.138 N2,N4-Bis(3-hydroxyphenyl)-5-trifluoromethyl-2,4-pyrimidinediamine (R925863)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-trifluoromethylpyrimidine and 3-aminophenol were reacted to yield N2,N4-bis(3-hydroxyphenyl)-5-trifluoromethyl-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.82 (bs, 1H), 8.88 (bs, 1H), 8.36 (s, 1H), 7.18-7.11 (m, 2H), 6.96 (m, 4H), 6.63 (dd, 1H, J= 2.4 and 8.1 Hz), 6.38 (d, 1H, J= 8.1 Hz); ^{19}F NMR (DMSO-d6): -16979; LCMS: ret. time: 19.04 min.; purity: 95 %; MS (m/e): 363 (MH^+).

7.3.139 N2,N4-Bis[4-(ethoxycarbonylmethyl)phenyl]-5-trifluoromethyl-2,4-pyrimidinediamine (R926663)

In a manner similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-trifluoromethylpyrimidine and ethyl 4-aminophenylacetate were reacted to yield N2,N4-bis[4-(ethoxycarbonylmethyl)phenyl]-5-trifluoromethyl-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.31 (s, 1H), 7.46 (d, 2H, J= 9.0 Hz), 7.45 (d, 2H, J= 8.7 Hz), 7.30 (d, 2H, J= 9.0 Hz), 7.18 (d, 2H, J= 8.7 Hz), 7.16 (bs, 1H), 6.82 (bs, 1H), 4.16 (2q, 4H, J= 7.8 Hz), 3.64 (s, 2H), 3.57 (s, 2H), 1.27 (t, 3H, J= 7.8 Hz), 1.26 (t, 3H, J= 7.8 Hz); ^{19}F NMR ($CDCl_3$): -17223; LCMS: ret. time: 28.07 min.; purity: 99 %; MS (m/e): 504 (MH^+).

7.3.140 N2,N4-Bis(2,5-dimethyl-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926623)

In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2,5-dimethyl-4-hydroxyaniline were reacted to yield N2,N4-bis(2,5-dimethyl-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.63 (d, 1H, J= 4.2 Hz), 7.05 (s, 1H), 6.97 (s, 1H), 6.64 (1H), 6.54 (s, 1H), 2.12 (s, 6H), 2.06 (s, 3H), 2.03 (s, 3H), 2.03 (s, 3H); ^{19}F NMR (CD_3OD): -48488; LCMS: ret. time: 18.28; purity; 94%; MS (m/e): 369 (MH^+).

7.3.141 N2,N4-Bis(3-sodiumphenoxy)-5-fluoro-2,4-pyrimidinediamine (R926461)

The reaction of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine with 2 equivalents of sodium methoxide in methanol followed by removal of solvent gave the requisite compound, N2,N4-bis(3-sodiumphenoxy)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (D_2O): δ 7.65 (bd, 1H), 7.00-6.90 (m, 2H), 6.71 (m, 2H), 6.55 (dd, 1H, J= 1.2 and 6.3

Hz), 6.31 (bd, 1H, J= 8.1 Hz), 6.23 (bd, 1H, J= 8.7 Hz); ^{19}F NMR (D_2O): -47016; LCMS: ret. time: 15.68 min.; purity: 99%; MS (m/e): 313 (MH^+).

7.3.142 N2,N4-Bis(3-cyanophenyl)-5-fluoro-2,4-pyrimidinediamine (R945051)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 3-aminobenzonitrile (177 mg, 1.5 mmol) and 2,4-dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol) gave N2,N4-bis(3-cyanophenyl)-5-fluoro-2,4-pyrimidinediamine (75 mg, 76%). ^{1}H NMR (acetone-d_6): δ 7.33 (dt, J= 1.8, 7.8 Hz, 1 H), 7.46-7.52 (m, 2 H), 7.59 (t, J= 7.8 Hz, 1 H), 7.90 (ddd, J= 0.9, 2.1 and 8.4 Hz, 1 H), 8.09 (ddd, J= 1.2, 2.4 and 8.4 Hz, 1 H), 8.17 (d, J= 3.3 Hz, 1 H), 8.31 (m, 1 H), 8.35 (t, J= 2.1 Hz, 1 H), 8.98 (br, 1 H, NH), 9.02 (br, 1 H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ -165.80; LCMS: 24.64 min.; purity: 98.02%; MS (m/e): 331.01 (MH^+).

7.3.143 N2,N4-Bis(benzothiophen-3-ylmethyl)-5-fluoro-2,4-pyrimidinediamine (R945145)

Using procedure similar to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, benzothiophen-3-ylmethylamine and 2,4-dichloro-5-fluoropyrimidine gave N2,N4-bis(benzothiophen-3-ylmethyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 4.82 (dd, J= 0.9 and 5.7 Hz, 2 H), 4.86 (dd, J= 0.9 and 5.7 Hz, 2 H), 5.14 (br, 2 H), 7.31-7.40 (m, 6 H), 7.75-7.89 (m, 5 H); ^{19}F NMR (282 MHz, $CDCl_3$): δ -172.12; LCMS: 27.79 min.; purity: 96.47%; MS (m/e): 420.92 (MH^+).

7.3.144 N2,N4-Bis[4-(N-benzylpiperazino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R945152)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 4-(N-benzylpiperazino)aniline (400 mg, 1.5 mmol) and 2,4-dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol) resulted N2,N4-bis[4-(N-benzylpiperazino)phenyl]-5-fluoro-2,4-pyrimidinediamine (120 mg, 64%). ^{1}H NMR ($CDCl_3$): δ 2.63 (p, J= 2.4 Hz, 8 H), 3.14 (t, J= 4.8 Hz, 4 H), 3.19 (t, J= 4.8 Hz, 4 H), 3.58 (s, 4 H), 6.58 (d, 1 H, NH), 6.67 (br, 1 H, NH), 6.87 (d, J= 9.3 Hz, 2 H), 6.90 (d, J= 9.0 Hz, 2 H), 7.33-7.39 (m, 12 H), 7.46 (d, J= 9.0 Hz, 2 H), 7.87 (d, J= 3.3 Hz, 1 H); ^{19}F NMR (282 MHz, $CDCl_3$): δ -169.06; LCMS: 16.82 min.; purity: 96.88%; MS (m/e): 629.12 (MH^+).

7.3.145 N2,N4-Bis(3-hydroxy-2-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R945038)

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 3-hydroxy-2-methylaniline (369 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis(3-hydroxy-2-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (180 mg, 88%). ^{1}H NMR (acetone-d_6): δ 2.14 (s, 3 H), 2.22 (s, 3 H), 6.61 (d, J= 8.1 Hz, 1 H), 6.78 (t, J= 8.7 Hz, 1 H), 6.87 (d, J= 7.8 Hz, 1 H), 6.99 (d, J= 9.0 Hz, 1 H), 7.08 (t, J= 7.8 Hz, 1 H), 7.13 (dd, J= 3.9, 8.4 Hz, 1 H), 8.24 (d, J= 5.1 Hz, 1 H), 8.32 (br, 1 H, NH), 8.57 (br, 1 H, NH); LCMS: ret. time: 16.51 min.; purity: 90.47%; MS (m/e): 341.07 (MH^+).

7.3.146 N2,N4-Bis(3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950160)

2,4-Dichloro-5-fluoropyrimidine (4.7 g, 28.1 mmol) was dissolved in a mixture of MeOH (150 ml) and H_2O (15 ml). 3-nitroaniline (15.5 g, 112 mmol) was added and the mixture was refluxed for 20 hours (100 °C oil-bath temperature). The mixture was cooled to 22 °C and filtered. The residue was washed carefully with 200 ml MeOH–H_2O (1:1; v/v) and dried under vacuum to give 7.89 g (76%) of N2,N4-bis(3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine as yellow crystals. ^{1}H NMR (DMSO-d6 + D_2O): δ 8.63 (m, 2H), 8.21 (m, 1H), 8.08 (d, 1H, J= 8.41 Hz), 7.88 (d, 1H, J= 8.4 Hz), 7.79 (d, 1H, J= 8.4 Hz), 7.70 (d, 1H, J= 8.4 Hz), 7.57 (d, 1H, J= 8.4 Hz), 7.45 (t, 1H, J= 8.4 Hz); LCMS: purity: 100%; MS (m/e): 371.30 (M^+, 100).

7.3.147 N2,N4-Bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine (R921302)

N2,N4-Bis(3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (4.0 g, 10.8 mmol) and Pd/C 10% (1.2 g, 50% water content) were suspended in 300 ml EtOH–10% aqueous HCl (1 : 1) and hydrogenated in a Parr apparatus for 6 hours (22 °C, 50 psi). The suspension was filtered over celite and carefully washed with 20 ml DMF–H_2O (1:1; v/v) followed by 50 ml H_2O. The combined filtrates were concentrated under reduced pressure to give pale yellow oil, which was triturated with MeOH to give the product as fine white needles. The precipitate was filtered off and washed with MeOH followed by Et_2O. The remaining crystals were dried under vacuum to give 4.00 g of pure material (100%) as determined by LCMS. The free amine was obtained by adding 10 ml 1 N NaOH to a solution of 1g HCl-

salt in 5 ml H_2O. The resulting precipitate was filtered, washed with H_2O and dried under vacuum for 24 hours to give N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine (770 mg) as a white solid. ^{1}H NMR (CD_3OD): δ 7.92 (d, 1H, J= 3.6 Hz), 7.31 (t, 1H, J= 2.1 Hz), 7.21 (t, 1H, J= 2.4 Hz), 7.08, (t, 1H, J= 8.1 Hz), 6.99 (t, 1H, J= 8.1 Hz), 6.88 (m, 1H), 6.77 (m, 1H), 6.47 (m, 1H), 6.34 (m, 1H); LCMS: purity: 100%; MS (m/e): 311.07 (M^+, 100).

7.3.148 N2,N4-Bis(4-aminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950122)

In like manner to the preparation of N2,N4-bis(3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 1,4-diaminobenzene were reacted to prepare N2,N4-bis(4-aminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 11.15 min.; purity: 100%; MS (m/e): 311.09 (MH^+).

7.3.149 N2,N4-Bis[3-(dimethylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950182)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.30 mmol) was dissolved in a mixture of MeOH (0.3 ml) and H_2O (0.03 ml). N,N-3-dimethyldiaminoaniline (163 mg, 1.2 mmol) was added and the mixture was refluxed for 24 hours (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 2 : 1) to give N2,N4-bis[3-(dimethylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS purity: 99.0%; MS (m/e): 367.13 (M^+, 100).

7.3.150 N2,N4-Bis(3-amino-4-methylphenyl)-2,4-pyrimidinediamine (R950130)

2,4-Dichloropyrimidine (45 mg, 0.30 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 3-amino-4-methylaniline (146 mg, 1.2 mmol) was added and the mixture was refluxed for 20 hours (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 2:1) to give N2,N4-bis(3-amino-4-methylphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.13 (s, 1H), 6.95 (d, 2H, J= 7.5 Hz), 6.82 (d, 2H, J= 1.8 Hz), 6.60 (dd, 2H, J= 1.8, 7.5 Hz), 6.17 (s, 1H), 2.12 (s, 6H); LCMS purity: 97.3%; MS (m/e): 321.09 (M^+, 100).

7.3.151 N2,N4-Bis(3-amino-4-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R950129)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.30 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 3-amino-4-methylaniline (146 mg, 1.2 mmol) was added and the mixture was refluxed for 20 hours (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 2:1) to give N2,N4-bis(3-amino-4-methylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (CD_3OD): δ 8.11 (d, 1H, J= 5.1 Hz), 7.98 (bs, 1H) (7.68 (dd, 1H, J= 2.4, 8.1 Hz), 7.40-7.55 (m, 4H), 2.43 (s, 3H), 2.42 (s, 3H); LCMS: purity: 95.0%; MS (m/e): 338.66 (M^+, 70).

7.3.152 N2,N4-Bis[(4-methylsulfonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950083)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.30 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 4-methylsulfonylaminoaniline (335 mg, 1.8 mmol) was added and the mixture was refluxed for 24 hours (100 °C oil-bath temperature). The mixture was cooled to 22 °C and filtered. The residue was washed carefully with MeOH–H_2O (1:1) and dried under vacuum to give N2,N4-bis[(4-methylsulfonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 8.86 (s, 1H), 8.65 (s, 1H), 8.53 (bs, 1H), 8.39 (bs, 1H), 7.32 (d, 1H, J= 3.3 Hz), 7.12 (d, 1H, J= 8.7 Hz), 6.98 (d, 1H, J= 8.7 Hz), 6.62 (d, 1H, J= 8.7 Hz), 6.52 (d, 1H, J= 8.7 Hz), 2.32 (s, 3H), 2.27 (s, 3H); LCMS: purity: 96.8%; MS (m/e): 466.94 (M^+, 100).

7.3.153 N2,N4-Bis(4-benzyloxy-3-trifluoromethylphenyl)-5-fluoro-2,4-pyrimidinediamine (R950090)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.30 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 4-benzyloxy-3-trifluoromethylaniline (481 mg, 1.8 mmol) was added and the mixture was refluxed for 2 days (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2,N4-bis(4-benzyloxy-3-trifluoromethylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 8.51 (s, 1H), 8.05 (s, 1H), 7.38-7.64 (m, 5H), 6.94-7.14 (m, 11H), 6.44-6.73 (m, 4H), 4.84 (s, 2H), 4.79 (s, 2H); LCMS purity: 94.7%; MS (m/e): 628.93 (M^+, 100).

7.3.154 N2,N4-Bis(3-cyano-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950092)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.30 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 3-cyano-4-hydroxyaniline (241 mg, 1.8 mmol) was added and the mixture was refluxed for 2 days (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2,N4-bis(4-hydroxy-3-cyanophenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.96 (d, 1H, J= 3.5 Hz), 7.82 (d, 1H, J= 3.0 Hz), 7.79 (d, 1H, J= 3.0 Hz), 7.71 (dd, 1H, J= 3.0, 8.8 Hz), 7.54 (dd, J= 3.0, 8.8 Hz), 6.94 (d, 1H, J= 8.8 Hz), 6.84 (d, 1H, J= 8.8 Hz); LCMS: purity: 97.2%; MS (m/e): 362.98 (M^+, 100).

7.3.155 N2,N4-Bis[3-methylsulfonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950100)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 3-methylsulfonylaminoaniline (300 mg, 1.5 mmol) was added and the mixture was refluxed for 24 hours (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2,N4-bis[3-methylsulfonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6 + CD_3OD): δ 8.01 (d, 1H, J= 3.5 Hz), 7.46-7.68 (m, 4H), 7.49 (t, 1H, J= 8.2 Hz), 7.13 (t, 1H, J= 8.2 Hz), 6.89 (dd, 1H, J= 2.4, 8.2 Hz), 6.72 (m, 1H), 2.95 (s, 3H), 2.91 (s, 3H); LCMS: purity: 97.2%; MS (m/e): 466.89 (M^+, 100).

7.3.156 N2,N4-Bis[3-(tert-butoxycarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950108)

2,4-Dichloro-5-fluoropyrimidine (75 mg, 0.45 mmol) was dissolved in a mixture of MeOH (2 ml) and H_2O (0.2 ml). 3-tert-butoxycarbonylaminoaniline (374 mg, 1.8 mmol) was added and the mixture was refluxed for 40 hours (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2,N4-bis[3-(tert-butoxycarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6 + CD_3OD): δ 7.96 (d, 1H, J= 4.1 Hz), 7.83 (m, 1H), 7.60 (m, 1H), 7.34-7.42 (m, 2H), 7.15-

7.19 (m, 2H), 7.06 (t, 1H, J= 8.2 Hz), 6.93 (d, 1H, J= 8.2 Hz), 1.43 (s, 9H), 1.40 (s, 9H); LCMS: purity: 93.2%; MS (m/e): 511.06 (M^+, 100).

7.3.157 N2,N4-Bis[4-(tert-butoxycarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950120)

2,4-Dichloro-5-fluoropyrimidine (75 mg, 0.45 mmol) was dissolved in a mixture of MeOH (2 ml) and H_2O (0.2 ml). 4-tert-butoxycarbonylaminoaniline (374 mg, 1.8 mmol) was added and the mixture was refluxed for 24 hours (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2,N4-bis[4-(tert-butoxycarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6 + CD_3OD): δ 7.96 (d, 1H, J= 3.5 Hz), 7.63 (d, 2H, J= 8.8 Hz), 7.49 (d, 2H, J= 8.8 Hz), 7.37 (d, 2H, J= 8.8 Hz), 7.24 (d, 2H, J= 8.8 Hz), 1.45 (s, 9H), 1.43 (s, 9H); LCMS: purity: 97.9%; MS (m/e): 511.04 (M^+, 100).

7.3.158 N2,N4-Bis[2-[2-(methylamino)ethyleneaminocarbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (R950170)

N2,N4-Bis[2-(ethoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (10 mg, 0.02 mmol) was dissolved in EtOH. To this was added N-methyl-1,2-aminoethane (0.1 ml : 0.1 ml) and the mixture was refluxed for 3 days (70 °C oil-bath temperature). The mixture was cooled to 22 °C, diluted with water and filtered. The residue was subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 2:1) to give N2,N4-bis[2-[2-(methylamino)ethyleneaminocarbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6 + CD_3OD): δ 8.14 (s, 1H), 8.02 (s, 1H), 7.99 (d, 1H, J= 2.4 Hz), 7.35-7.68 (m, 5H), 7.17 (s, 1H), 3.41 (m, 2H), 2.75 (m, 2H), 2.35 (s, 3H); LCMS: purity: 84.2%; MS (m/e): 561.08 (M^+, 100).

7.3.159 N2,N4-Bis[2-(2-hydroxyethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (R950167)

In like manner to the preparation of N2,N4-bis[2-[2-(methylamino)ethyleneamino carbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis[2-(ethoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine and 2-aminoethanol were reacted to prepare N2,N4-bis[2-(2-hydroxyethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 14.22 min.; purity: 95.7%; MS (m/e): 535.01 (MH^+).

7.3.160 N2,N4-Bis[2-(2-aminoethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (R950168)

In like manner to the preparation of N2,N4-bis[2-[2-(methylamino)ethyleneamino carbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis[2-(ethoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine and 1,2-diaminoethane were reacted to prepare N2,N4-bis[2-(2-aminoethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 13.15 min.; purity: 95.8%; MS (m/e): 532.99 (MH^+).

7.3.161 N2,N4-Bis[2-(2-(N-benzylamino)ethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (R950169)

In like manner to the preparation of N2,N4-bis[2-[2-(methylamino)ethyleneamino carbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis[2-(ethoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine and N-benzyl-1,2-diaminoethane were reacted to prepare N2,N4-bis[2-(2-(N-benzylamino)ethyleneamoino carbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 13.15 min.; purity: 95.8%; MS (m/e): 713.10 (MH^+).

7.3.162 N2,N4-Bis[2-(N-morpholinocarbonyl)benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (R950172)

In like manner to the preparation of N2,N4-bis[2-[2-(methylamino)ethyleneamino carbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis[2-(ethoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine and morpholine were reacted to N2,N4-bis[2-(N-morpholinocarbonyl)benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6 + CD_3OD): δ 8.13 (d, 1H, J= 2.7 Hz), 8.06 (d, 1H, J= 2.4 Hz), 8.03 (d, 1H, J= 3.6 Hz), 7.63 (dd, 1H, J= 2.4, 8.8 Hz), 7.57 (d, 1H, J= 9.3 Hz), 7.49 (dd, 1H, J= 2.4, 8.4 Hz), 7.42 (d, 1H, J= 8.8 Hz), 7.25 (s, 1H), 7.05 (s, 1H), 4.09 (m, 4H), 3.65 (m, 4H); LCMS: ret. time: 18.04 min.; purity: 83.2%; MS (m/e): 587.04 (MH^+).

7.3.163 N2,N4-Bis[2-(2-N-morpholinoethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine (R950173)

In like manner to the preparation of N2,N4-bis[2-[2-(methylamino)ethyleneamino carbonyl]-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis[2-(ethoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine and N-(2-aminoethyleneamino)morpholine were reacted to prepare N2,N4-bis[2-(2-N-

morpholinoethyleneamoinocarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6 + CD_3OD): δ 8.16 (d, 1H, J= 2.4 Hz), 8.03-8.05 (m, 2H), 7.71 (dd, 1H, J= 1.8, 8.8 Hz), 7.56 (d, 1H, J= 8.8Hz), 7.42 (d, 1H, J= 8.8 Hz), 7.36 (s, 1H), 7.19 (s, 1H), 4.19 (m, 4H), 3.38 (m, 4H), 3.16 (t, 2H, J= 6.3 Hz), 2.28 (t, 2H, J= 6.3 Hz); LCMS: ret. time: 12.85 min.; purity: 93.8%; MS (m/e): 673.35 (MH^+).

7.3.164 N2,N4-Bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950135)

2,4-Dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 3-amino-4-nitroaniline (184 mg, 1.2 mmol) was added and the mixture was refluxed for 3 days (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 2:1) to give N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6 + CD_3OD): δ 8.21 (d, 1H, J= 2.9 Hz), 7.89 (m, 3H), 7.56 (d, 1H, J= 2.3 Hz), 7.01 (m, 1H), 6.81 (dd, 1H, J= 2.3, 9.4 Hz); LCMS: purity: 91.1%; MS (m/e): 401.00 (M^+, 100).

7.3.165 N2,N4-Bis(3-amino-2,4-difluorophenyl)-5-fluoro-2,4-pyrimidinediamine (R950138)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-2,4-difluoroaniline were reacted to prepare N2,N4-bis(3-amino-2,4-difluorophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 16.98 min.; purity: 91.7%; MS (m/e): 382.97 (MH^+).

7.3.166 N2,N4-Bis(3-amino-4-ethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950139)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-4-ethoxyaniline were reacted to prepare N2,N4-bis(3-amino-4-ethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 14.29 min.; purity: 93.4%; MS (m/e): 399.09 (MH^+).

7.3.167 N2,N4-Bis(3-amino-5-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (R950134)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-5-

methoxycarbonylaniline were reacted to prepare N2,N4-bis(3-amino-5-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 14.72 min.; purity: 93.8%; MS (m/e): 427.02 (MH^+).

7.3.168 N2,N4-Bis(3-amino-5-trifluoromethylphenyl)-5-fluoro-2,4-pyrimidinediamine (R950140)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-5-trifluoromethylaniline were reacted to prepare N2,N4-bis(3-amino-5-trifluoromethylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 23.35 min.; purity: 100%; MS (m/e): 446.92 (MH^+).

7.3.169 N2,N4-Bis(3-amino-5-chlorophenyl)-5-fluoro-2,4-pyrimidinediamine (R950141)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-5-chloroaniline were reacted to prepare N2,N4-bis(3-amino-5-chlorophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 19.25 min.; purity: 99.3%; MS (m/e): 378.91 (MH^+).

7.3.170 N2,N4-Bis(4-hydroxy-3-trifluoromethylphenyl)-5-fluoro-2,4-pyrimidinediamine (R950093)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-hydroxy-3-trifluoromethylaniline were reacted to prepare N2,N4-bis(4-hydroxy-3-trifluoromethylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 22.06 min.; purity: 99.1%; MS (m/e): 448.88 (MH^+).

7.3.171 N2,N4-Bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine Hydrogen Chloride salt (R950107)

N2,N4-Bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine was treated with 2 equivalents of HCl in dioxane. The volatiles were removed under reduced pressure to give N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine hydrogen chloride salt. LCMS: ret. time: 9.74 min.; purity: 91.3%; MS (m/e): 311.06 (MH^+).

7.3.172 N2,N4-Bis(4-aminophenyl)-5-fluoro-2,4-pyrimidinediamine Hydrogen Chloride Salt (R950121)

N2,N4-Bis(4-aminophenyl)-5-fluoro-2,4-pyrimidinediamine was treated with 2 equivalents of HCl in dioxane. The volatiles were removed under reduced pressure to give N2,N4-bis(4-aminophenyl)-5-fluoro-2,4-pyrimidinediamine Hydrogen Chloride Salt. LCMS: ret. time: 11.15 min.; purity: 100%; MS (m/e): 311.09 (MH^+).

7.3.173 N2,N4-Bis(3-aminophenyl)-2,4-pyrimidinediamine (R950109)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-aminoaniline were reacted to prepare N2,N4-bis(3-aminophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 8.90 min.; purity: 91%; MS (m/e): 293.06 (MH^+).

7.3.174 N2,N4-Bis(3-amino-2,4-difluorophenyl)-2,4-pyrimidinediamine (R950131)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-amino-2,4-difluoroaniline were reacted to prepare N2,N4-bis(3-amino-2,4-difluorophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 16.62 min.; purity: 96.7%; MS (m/e): 364.99 (MH^+).

7.3.175 N2,N4-Bis(3-amino-4-ethoxyphenyl)-2,4-pyrimidinediamine (R950142)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-amino-4-ethoxyaniline were reacted to prepare N2,N4-bis(3-amino-4-ethoxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 14.38 min.; purity: 99.7%; MS (m/e): 381.07 (MH^+).

7.3.176 N2,N4-Bis(3-amino-5-methoxycarbonylphenyl)-2,4-pyrimidinediamine (R950132)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-amino-5-methoxycarbonylaniline were reacted to prepare N2,N4-bis(3-amino-5-methoxycarbonylphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 15.25 min.; purity: 93.6%; MS (m/e): 409.02 (MH^+).

7.3.177 N2,N4-Bis(3-amino-5-trifluoromethylphenyl)-2,4-pyrimidinediamine (R950143)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-amino-5-trifluoromethylaniline were reacted to prepare N2,N4-bis(3-amino-5-trifluoromethylphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 23.23 min.; purity: 99.1%; MS (m/e): 428.95 (MH^+).

7.3.178 N2,N4-Bis(3-amino-5-chlorophenyl)-2,4-pyrimidinediamine (R950133)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-amino-5-chloroaniline were reacted to prepare N2,N4-bis(3-amino-5-chlorophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 19.45 min.; purity: 100%; MS (m/e): 360.93 (MH^+).

7.3.179 N2,N4-Bis[3-amino-4-(N-phenylamino)-phenyl]-5-fluoro-2,4-pyrimidinediamine (R950125)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-4-(N-phenylamino)-aniline were reacted to prepare N2,N4-bis[3-amino-4-(N-phenylamino)-phenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 23.67 min.; purity: 100%; MS (m/e): 476.36 (MH^+).

7.3.180 N2,N4-Bis[3-amino-4-(N-phenylamino)-phenyl]-2,4-pyrimidinediamine (R950123)

In like manner the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 3-amino-4-(N-phenylamino)-aniline were reacted to prepare N2,N4-bis[3-amino-4-(N-phenylamino)-phenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 23.77 min.; purity: 77.8%; MS (m/e): 475.04 (MH^+).

7.3.181 N2,N4-Bis(5-amino-2-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R950157)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 5-amino-2-methylaniline were reacted to prepare N2,N4-bis(5-amino-2-methylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 10.61 min.; purity: 83.4%; MS (m/e): 339.13 (MH^+).

7.3.182 N2,N4-Bis(5-amino-2-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine (R950158)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 5-amino-2-fluoroaniline were reacted to prepare N2,N4-bis(5-amino-2-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 11.48 min.; purity: 95.6%; MS (m/e): 347.04 (MH^+).

7.3.183 N2,N4-Bis(3-amino-4-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine (R950159)

In like manner to the preparation of N2,N4-bis(3-amino-4-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 3-amino-4-fluoroaniline were reacted to prepare N2,N4-bis(3-amino-4-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 18.74 min.; purity: 95.6%; MS (m/e): 347.29 (MH^+).

7.3.184 N2,N4-Bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950146)

2,4-Dichloro-5-fluoropyrimidine (33 mg, 0.2 mmol) was dissolved in a mixture of MeOH (1 ml) and H_2O (0.1 ml). 2-Methyl-5-nitroaniline (122 mg, 0.8 mmol) was added and the mixture was refluxed for 2 days (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6 + CD_3OD): δ 8.31 (d, 1H, J= 2.3 Hz), 8.20 (d, 1H, J= 2.3 Hz), 8.06 (d, 1H, J= 3.5 Hz), 7.91 (dd, 1H, J= 2.3, 8.2 Hz), 7.65 (dd, 1H, J= 2.9, 8.8 Hz), 7.41 (m, 1H), 7.28 (d, 1H, J= 8.2 Hz), 2.28 (s, 3H), 2.24 (s, 3H); LCMS purity: 87.4%; MS (m/e): 399.20 (M^+, 100).

7.3.185 N2,N4-Bis(2-fluoro-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950147)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-fluoro-5-nitroaniline were reacted to prepare N2,N4-bis(2-fluoro-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 31.07 min.; purity: 93.6%; MS (m/e): 407.14 (MH^+).

7.3.186 N2,N4-Bis(4-fluoro-3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950148)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-fluoro-3-nitroaniline were reacted to prepare N2,N4-bis(4-fluoro-3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 27.17 min.; purity: 94.3%; MS (m/e): 406.96 (MH^+).

7.3.187 N2,N4-Bis(4-methyl-3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950144)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-methyl-3-nitroaniline were reacted to prepare N2,N4-bis(4-methyl-3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 27.40 min.; purity: 96.6%; MS (m/e): 399.00 (MH^+).

7.3.188 N2,N4-Bis(4-chloro-3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950149)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 4-chloro-3-nitroaniline were reacted to prepare N2,N4-bis(4-chloro-3-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 35.63 min.; purity: 98.9%; MS (m/e): 439.09 (MH^+).

7.3.189 N2,N4-Bis(2-hydroxyethyleneamino-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950150)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-hydroxyethyleneamino-5-nitroaniline were reacted to prepare N2,N4-bis(2-hydroxyethyleneamino-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 17.90 min.; purity: 97.8%; MS (m/e): 489.19 (MH^+).

7.3.190 N2,N4-Bis(2-methoxy-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine (R950151)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine and 2-methoxy-5-nitroaniline were reacted to prepare N2,N4-bis(2-methoxy-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 31.46 min.; purity: 95.9%; MS (m/e): 431.22 (MH^+).

7.3.191 N2,N4-Bis(4-fluoro-3-nitrophenyl)-2,4-pyrimidinediamine (R950152)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 4-fluoro-3-nitroaniline were reacted to prepare N2,N4-bis(4-fluoro-3-nitrophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 30.92 min.; purity: 94.4%; MS (m/e): 389.31 (MH^+).

7.3.192 N2,N4-Bis(4-methyl-3-nitrophenyl)-2,4-pyrimidinediamine (R950153)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 4-methyl-3-nitroaniline were reacted to prepare N2,N4-bis(4-methyl-3-nitrophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 31.22 min.; purity: 99.6%; MS (m/e): 381.35 (MH^+).

7.3.193 N2,N4-Bis(4-chloro-3-nitrophenyl)-2,4-pyrimidinediamine (R950154)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 4-chloro-3-nitroaniline were reacted to prepare N2,N4-bis(4-chloro-3-nitrophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 37.24 min.; purity: 99.1%; MS (m/e): 421.30 (MH^+).

7.3.194 N2,N4-Bis(2-hydroxy-5-nitrophenyl)-2,4-pyrimidinediamine (R950155)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 2-hydroxy-5-nitroaniline were reacted to prepare N2,N4-bis(2-hydroxy-5-nitrophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 23.26 min.; purity: 100%; MS (m/e): 385.33 (MH^+).

7.3.195 N2,N4-Bis(2-hydroxyethyleneamino-5-nitrophenyl)-2,4-pyrimidinediamine (R950156)

In like manner to the preparation of N2,N4-bis(2-methyl-5-nitrophenyl)-5-fluoro-2,4-pyrimidinediamine, 2,4-dichloropyrimidine and 2-hydroxyethyleneamino-5-nitroaniline were reacted to prepare N2,N4-bis(2-hydroxyethyleneamino-5-nitrophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 17.87 min.; purity: 97.2%; MS (m/e): 470.99 (MH^+).

7.3.196 N2,N4-Bis[3-(N-isopropyl)aminophenyl]-5-fluoro-2,4-pyrimidinediamine (R950166)

N2,N4-Bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine, acetone and sodiumcyanoborohydride were reacted together to give N2,N4-bis[3-(N-isopropyl)aminophenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 14.07 min.; purity: 90.3%; MS (m/e): 395.14 (MH^+).

7.3.197 N2,N4-Bis[3-N-(2-hydroxy-1-methylethyl)aminophenyl]-5-fluoro-2,4-pyrimidinediamine (R950171)

N2,N4-Bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine, 1-hydroxyacetone and sodiumcyanoborohydride were reacted to give N2,N4-bis[3-N-(2-hydroxy-1-methylethyl)aminophenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 11.97 min.; purity: 79.01%; MS (m/e): 427.12 (MH^+).

7.3.198 N2,N4-Bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950177)

N2,N4-Bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and tert-butyl bromoacetate were reacted together to give N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 29.34 min.; purity: 97.2%; MS (m/e): 427.07 (MH^+).

7.3.199 N4-(3-Aminophenyl)-N2-(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950178)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and tert-butyl bromoacetate were reacted together to give N4-(3-aminophenyl)-N2-(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 18.33 min.; purity: 94.5%; MS (m/e): 369.09 (MH^+).

7.3.200 N2-(3-Aminophenyl)-N4-(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950179)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-

aminophenyl)-5-fluoro-2,4-pyrimidinediamine and tert-butyl bromoacetate were reacted together to give N2-(3-aminophenyl)-N4-(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 18.82 min.; purity: 85.8%; MS (m/e): 369.11 (MH^+).

7.3.201 N2,N4-Bis(3-ethoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950184)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and ethyl bromoacetate were reacted together to give N2,N4-bis(3-ethoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 23.41 min.; purity: 96.3%; MS (m/e): 483.08 (MH^+).

7.3.202 N2,N4-Bis(3-ethoxycarbonylmethyleneaminophenyl)-N2-(ethoxycarbonylmethyl)-5-fluoro-2,4-pyrimidinediamine (R950183)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and ethyl bromoacetate were reacted together to give N2,N4-bis(3-ethoxycarbonylmethyleneaminophenyl)-N2-(ethoxycarbonylmethyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 25.65 min.; purity: 92.5%; MS (m/e): 569.08 (MH^+).

7.3.203 N2-(3-Aminophenyl)-N4-(3-hydroxyethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine and N4-(3-Aminophenyl)-N2-(3-hydroxyethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950180)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and 1-bromo-2-hydroxyethane were reacted together to give a unseparable mixture of N2-(3-aminophenyl)-N4-(3-hydroxyethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine and N4-(3-aminophenyl)-N2-(3-hydroxyethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 9.84 min.; purity: 89.5%; MS (m/e): 355.10 (MH^+).

7.3.204 N2,N4-Bis(3-hydroxyethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950181)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and 1-bromo-2-hydroxyethane were reacted together to give N2,N4-bis(3-hydroxyethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 11.46 min.; purity: 83.3%; MS (m/e): 399.12 (MH^+).

7.3.205 N2,N4-Bis[3-(N-benzyloxyethyleneamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950174)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and 1-benzyloxy-2-bromoethane were reacted together to give N2,N4-bis[3-(N-benzyloxyethyleneamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 32.92 min.; MS (m/e): 579.17 (MH^+).

7.3.206 N2-(3-Aminophenyl)-N4-[3-(N-benzyloxyethyleneamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950175)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and 1-benzyloxy-2-bromoethane were reacted together to give N2-(3-aminophenyl)-N4-[3-(N-benzyloxyethyleneamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 23.79 min.; MS (m/e): 445.11 (MH^+).

7.3.207 N4-(3-Aminophenyl)-N2-[3-(N-benzyloxyethyleneamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R950176)

In like manner to the preparation of N2,N4-bis(3-tert-butoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-aminophenyl)-5-fluoro-2,4-pyrimidinediamine and 1-benzyloxy-2-bromoethane were reacted together to give N4-(3-aminophenyl)-N2-[3-(N-benzyloxyethyleneamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 23.64 min.; MS (m/e): 445.13 (MH^+).

7.3.208 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926210)

To a solution of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine (0.028g, 0.1 mmol) in MeOH: H_2O (1.8: 0.2 mL) was added 3-hydroxyaniline (0.033g, 0.3 mmol) and heated in a sealed tube at 100 °C for 24h. The resulting reaction was diluted with H_2O (10 mL), acidified with 2N HCl (pH >2), saturated and the resulting solid was filtered to give the desired product, N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl))-2,4-pyrimidinediamine (**R926210**). Purifieation can be done by filtration through a pad of silica gel using 1-5% MeOH in CH_2Cl_2 or by crystallization using an appropriate solvent system. ^{1}H NMR ($CDCl_3$ + CD_3OD): δ 7.76 (bs, 1H), 7.30 (d, 1H, J= 2.4 Hz), 7.10 (m, 1H), 7.03 (t, 1H, J= 8.1 Hz), 6.89 (dd, 2H, J= 2.4 and 9 Hz), 6.78 (d, 1H, J= 8.7 Hz), 6.42 (dd, 1H, J= 2.4 and 9 Hz), 4.22 (m, 4H); ^{19}F NMR ($CDCl_3$ + CD_3OD): - 47196; LCMS: ret. time: 19.55 min.; purity: 95%; MS (m/e): 355 (MH^+).

Note: When the substrate has ethyl, butyl, benzyl etc. ester functions and the reaction is carried out in methanol as a solvent, the cross esterification to produce methyl ester was observed.

7.3.209 N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[3-(hydroxymethyl)phenyl]-2,4-pyrimidinediamine (R925758)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[3-(hydroxymethyl)phenyl]-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[3-(hydroxymethyl)phenyl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.92 (d, 1H, J= 3.0 Hz), 7.78 (bs, 1H), 7.41-7.31 (m, 3H), 7.12 (d, 1H, J= 7.2 Hz), 6.94 (bs, 1H), 6.81-6.75 (m, 3H), 4.68 (s, 2H), 4.25 (s, 4H); ^{19}F NMR ($CDCl_3$): - 47438; LCMS: ret. time: 17.73 min.; purity: 100 %; MS (m/e): 369 (MH^+).

7.3.210 N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[4-(hydroxymethyl)phenyl]-2,4-pyrimidinediamine (R925760)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(hydroxymethyl)phenyl]-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[4-(hydroxymethyl)phenyl]-2,4-

pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.92 (bs, 1H), 7.62 (d, 2H, J= 8.7 Hz), 7.36 (d, 2H, J= 8.7 Hz), 7.19 (d, 1H, J= 2.1), 6.87 (dd, 1H, J= 2.7 and 8.7 Hz), 6.79 (d, 1H, J= 8.7 Hz), 4.68 (s, 2H), 4.28-4.23 (m, 4H); ^{19}F NMR ($CDCl_3$): - 4.7466; LCMS: ret. time: 17.86 min.; purity: 93 %; MS (m/e): 369 (MH^+).

7.3.211 N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(2-hydroxy-2-phenylethyl)-2,4-pyrimidinediamine (R925765)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(2-hydroxy-2-phenylethyl)-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(2-hydroxy-2-phenylethyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.79 (s, 1H), 7.48 (m, 5H), 6.89-6.71 (m, 3H), 5.41-5.38, 4.97 (dd, 1H, J= 3.6 and 7.5 Hz), 4.28-4.22 (m, 4H), 3.88 (ddd, 1H, J= 4.2, 7.2, and 14.1), 3.64-3.55 (m, 1H); ^{19}F NMR ($CDCl_3$): - 47910; LCMS: ret. time: 20.47 min.; purity: 88 %; MS (m/e): 383 (MH^+).

7.3.212 N2-(3,4-Ethylendioxyphenyl)-5-fluoro-N4-[(2R)-hydroxy-(1S)-methyl-2-phenylethyl)-2,4-pyrimidinediamine (R925766)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[(2R)-hydroxy-(1S)-methyl-2-phenylethyl)-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N2-(3,4-ethylendioxyphenyl)-5-fluoro-N4-[(2R)-hydroxy-(1S)-methyl-2-phenylethyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.80 (bs, 1H), 7.71 (bs, 1H), 7.36-7.23 (m, 6H), 6.91 (dd, 1H, J= 3.0 and 9.0 Hz), 6.80 (d, 1H, J= 9.0 Hz), 5.17 (d, 1H, J= 8.1 Hz), 5.01 (d, 1H, J= 3.0 Hz), 4.56-4.50 (m, 1H), 4.24 (s, 4H), 1.10 (d, 3H, J= 6.3 Hz); ^{19}F NMR ($CDCl_3$): - 47840; LCMS: ret. time: 21.43 min.; purity: 99 %; MS (m/e): 397 (MH^+).

7.3.213 N4-Cyclohexyl-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R925794)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-cyclohexyl-5-fluoro-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N4-cyclohexyl-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.62 (d, 1H, J= 4.2 Hz), 7.31 (d, 1H, J= 2.1 Hz), 6.86 (dd, 1H, J= 2.4 and 8.7 Hz), 6.68 (d, 1H, J=

8.7 Hz), 4.23-4.16 (m, 4H), 3.99-3.89 (m, 1H), 2.03 (dd, 2H, J= 2.1 and 12.3 Hz), 1.80 (dt, 2H, J= 3.0 and 13.5 Hz), 1.72-1.65 (m, 1H), 1.49-1.20 (m, 5H); ^{19}F NMR (CD_3OD): - 48332; LCMS: ret. time: 24.54 min.; purity: 95 %; MS (m/e): 345 (MH^+).

7.3.214 N4-(4-Carboxycyclohexyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R925795)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(4-carboxycyclohexyl)-2-chloro-5-fluoro-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N4-(4-carboxycyclohexyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.62 (d, 1H, J= 4.2 Hz), 7.31 (d, 1H, J= 2.4 Hz), 6.84 (dd, 1H, J= 2.4 and 8.7 Hz), 6.70 (d, 1H, J= 8.7 Hz), 4.23-4.18 (m, 4H), 3.99-4.08 (m, 1H), 2.59 (t, 1H, J= 3.9 Hz), 2.16-2.09 (m, 2H), 1.91-1.84 (m, 2H), 1.78-1.57 (m, 4H); ^{19}F NMR (CD_3OD): - 48152; LCMS: ret. time: 19.31 min.; purity: 96 %; MS (m/e): 389 (MH^+).

7.3.215 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R925796)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.30 (s, 1H), 9.12 (bs, 1H), 8.91 (bs, 1H), 8.02 (d, 1H, J= 3.3 Hz), 7.35-7.30 (m, 1H), 7.24-7.21 (m, 1H), 7.12 (t, 1H, J= 1.8 Hz), 7.09-7.04 (m, 2H), 6.67 (d, 1H, J= 9.0), 6.46 (dd, 1H, J= 1.8 and 8.4 Hz), 4.18-4.12 (m, 4H); ^{19}F NMR (DMSO-d6): - 46594; LCMS: ret. time: 18.43 min.; purity: 97 %; MS (m/e): 355 (MH^+).

7.3.216 N2-Allyl-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R925823)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and allylamine were reacted to yield N2-allyl-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.71 (bs, 1H), 7.37 (d, 1H, J= 2.4 Hz), 7.07 (dd, 1H, J= 2.4 and 8.7 Hz), 6.75 (d, 1H, J= 8.7 Hz), 5.98-5.85 (m, 1H), 5.19 (dq, 1H, J= 1.8 and 16.8 Hz), 5.06 (dq, 1H, J= 1.8 and 10.5 Hz), 4.24-4.18 (m,

4H), 3.92-3.68 (m, 2H); ^{19}F NMR (CD_3OD): - 48552; LCMS: ret. time: 19.36 min.; purity: 95 %; MS (m/e): 303 (MH^+).

7.3.217 N4-(3,4-Ethylenedioxyphenyl)-N2-(4-ethylphenyl)-5-fluoro-2,4-pyrimidinediamine (R926237)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-ethylaniline were reacted to yield N4-(3,4-ethylenedioxyphenyl)-N2-(4-ethylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.87 (bs, 1H), 7.42 (d, 2H, J= 8.7 Hz), 7.26 (d, 1H, J= 3.0 Hz), 7.13-7.08 (m, 3H), 6.95 (dd, 1H, J= 2.4 and 8.7 Hz), 6.82 (d, 1H, J= 9.0 Hz), 6.60 (bs, 1H), 4.23 (s, 4H), 2.59 (q, 2H, J= 7.5 Hz), 1.20 (t, 3H, J= 7.5 Hz); ^{19}F NMR ($CDCl_3$): - 47549; LCMS: ret. time: 25.31min.; purity: 99 %; MS (m/e): 367 (MH^+).

7.3.218 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[2-(methoxycarbonyl)benzofuran-5-yl]-2,4-pyrimidinediamine (R926690)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[2-(methoxycarbonyl)benzofuran-5-yl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.68 (bs, 1H), 8.13-8.10 (m, 2H), 7.63-7.54 (m, 3H), 7.27 (bs, 1H), 7.10 (d, 1H, J= 8.7 Hz), 6.80 (d, 1H, J= 8.1 Hz), 4.21 (s, 4H), 3.88 (s, 3H); LCMS: ret. time: 23.22 min.; purity: 95 %; MS (m/e): 437 (MH^+).

7.3.219 5-Fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-N4-(4-isopropoxyphenyl)- 2,4-pyrimidinediamine (R926704)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(isopropoxy)phenyl]-4-pyrimidineamine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to yield 5-fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-N4-(4-isopropoxyphenyl)- 2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.04 (d, 1H, J= 1.8 Hz), 7.49-7.41 (m, 4H), 7.35 (dd, 1H, J= 2.4 and 8.7 Hz), 7.14 (bs, 1H), 6.90 (d, 2H, J= 9.3 Hz), 6.70 (bs, 1H), 4.56 (2q, 1H, J= 5.7 Hz), 3.98 (s, 3H), 1.37 (d, 6H, J= 5.7 Hz); LCMS: ret. time: 25.52 min.; purity: 98 %; MS (m/e): 437 (MH^+).

7.3.220 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[4-(2-hydroxyethyl)oxyphenyl]-2,4-pyrimidinediamine (R926376)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)]-4-pyrimidineamine and 4-(2-hydroxyethyloxy)aniline were reacted to yield 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(2-hydroxyethyl)oxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (D_2O): δ 8.40 (d, 1H J= 4 Hz), 7.57 (m, 6H), 7.12 (m, 2H), 6.90 (m, 2H), 4.40 (m, 4H) 2,2 (s, 3H); LCMS: ret. time: 13.61 min.; purity: 97 %; MS (m/e): 357 (MH^+).

7.3.221 N2-[4-(2-N,N-Dimethylamino)ethoxyphenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R909236)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)]-4-pyrimidineamine and 4-(2-N,N-dimethylamino)ethoxyaniline were reacted to yield N2-[4-(2-N,N-dimethylamino)ethoxyphenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.80 (d, 1H J= 4 Hz), 7.47 (dd, 1H, J= 6.8 Hz, 2.7 Hz), 7.44 (m, 1H), 7.05 (m, 1H), 6.85 (m, 1H), 6.78 (m, 2H), 4.16 (m, 2H), 3.03 (m, 2H), 2.55 (s, 6H); LCMS: ret. time: 12.74 min.; purity: 98 %; MS (m/e): 384 (MH^+).

7.3.222 N2-(1,4-Benzoxazin-3-on-6-yl)- 5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R909238)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)]-4-pyrimidineamine and 6-amino-1,4-benzoxazin-3-one were reacted to yield N2-(1,4-benzoxazin-3-on-6-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.18 (d, 1H J= 4 Hz), 7.17 (m, 3H), 7.09 (m, 1H), 7.06 (m, 1H), 6.58 (m, 1H) 4.52 (s, 3H); LCMS: ret. time: 17.18 min.; purity: 99 %; MS (m/e): 368 (MH^+).

7.3.223 N2-(1,4-Benzoxazin-6-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R909241)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)] pyrimidineamine and 6-amino-1,4-benzoxazine were reacted to yield N2-(1,4-benzoxazin-6-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ □□□(d, 1H, J= 4 Hz), 7.15

(m, 3H), 6.68 (m, 2H), 6.52 (m, 2H), 6.52 (m, 1H), 4.18 (m, 2H), 3.37 (m, 2H); LCMS: ret. time 17.42 min.; purity: 95%; MS (m/e): 354 (MH^+).

7.3.224 N4-(1,4-Benzoxazin-6-yl)-N2-[3-ethoxyocarbonylmethyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (R909242)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-chloro-5-fluoro-4-pyrimidineamine and 3-ethoxyocarbonylmethyleneoxyaniline were reacted to yield N4-(1,4-benzoxazin-6-yl)-N2-(3-ethoxyocarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (CD_3OD): δ □□(d, 1H, J= 4 Hz), 7.15 (m, 4H), 6.84 (m, 2H), 6.62 (m, 1H), 4.65 (s, 2H), 4.15 (m, 4H), 3.28 (m, 2H), 1.19 (t, 3H. J= 7 Hz); LCMS: ret. time 22.6 min.; purity: 94%; MS (m/e): 439 (MH^+).

7.3.225 N2-(1,4-Benzoxazin-6-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R909243)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-chloro-5-fluoro-4-pyrimidineamine and 3-aminophenol were reacted to yield N4-(1,4-benzoxazin-6-yl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ □□□(d, 1H, J= 4 Hz), 7.18 (m, 3H), 6.68 (m, 2H), 6.45 (m, 2H), 6.52 (m, 1H), 4.22 (m, 2H), 3.31 (m, 2H); LCMS: ret. time: 17.24; purity: 96%; MS (m/e): 354 (MH^+).

7.3.226 N4-(1,4-Benzoxazin-6-yl)-N2-(3,5-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R909245)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-chloro-5-fluoro-4-pyrimidineamine and 3,5-dimethoxyaniline were reacted to yield N4-(1,4-benzoxazin-6-yl)-N2-(3,5-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ □ı□ (d, 1H, J= 4 Hz), 6.80 (m, 4H), 6.60 (m, 1H), 6.05 (m, 1H), 4.02 (m, 2H), 3.65 (s, 6H), 3.31 (m, 2H); LCMS: ret. time: 22.38 min.; purity: 99 %; MS (m/e): 398 (MH^+).

7.3.227 N4-(1,4-Benzoxazin-6-yl)-N2-(3-*tert*-butylphenyl)-5-fluoro-2,4-pyrimidinediamine (R909246)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-chloro-5-fluoro-4-pyrimidineamine

and 3-*tert*-butylaniline were reacted to yield N4-(1,4-benzoxazin-6-yl)-N2-(3-*tert*-butylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ □□ (d, 1H, J= 4 Hz), 7.5 (m, 1H), 7.4 (m, 1H), 7.18 (m, 1H), 7.02 (m, 1H), 6.80 (m, 2H), 6.60 (m, 1H), 4.02 (m, 2H), 3.31 (m, 2H), 1.2 (s, 9H); LCMS: ret. time: 26.64 min.; purity: 99 %; MS (m/e): 508 (MH^+).

7.3.228 N4-(1,4-Benzoxazin-6-yl)-5-fluoro-N2-[4-(2-hydroxyethyl)oxyphenyl]-2,4-pyrimidinediamine (R909248)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-chloro-5-fluoro-4-pyrimidineamine and 4-(2-hydroxyethyl)oxyaniline were reacted to yield N4-(1,4-benzoxazin-6-yl)-5-fluoro-N2-[4-(2-hydroxyethyl)oxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ □□□(d, 1H, J= 4 Hz), 7.52 (m, 1H), 7.4 (m, 3H), 6.90 (m, 2H), 6.68 (m, 1H), 4.56 (s, 2H), 4.02 (m, 2H), 3.75 (m, 2H), 3.31 (m, 4H); LCMS: ret. time: 26.67 min.; purity: 93 %; MS(m/e): 399 (MH^+).

7.3.229 N2-(2,3-Dihydrobenzofuran-5-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R909250)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)]-4-pyrimidineamine and 5-amino-2,3-dihydrobenzofuran were reacted to yield N2-(2,3-dihydrobenzofuran-5-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}HNMR (DMSO-d6): δ 8.09 (d, 1H), 8.00 (m, 1H), 7.82 (m, 1H), 7.57 (m, 1H), 7.22 (m, 1H), 7.08 (m, 1H), 6.99 (m, 1H), 6.82 (m, 1H), 6.70 (m, 1H), 6.42 (m, 1H), 4.49 (m, 2H), 3.15 (m, 2H); LCMS: ret time: 19.39 min.; MS (m/e): 338 (MH^+).

7.3.230 N4-(1,4-Benzoxazin-6-yl)-N2-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R909255)

In like manner to N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-chloro-5-fluoro-4-pyrimidineamine and 3-chloro-4-hydroxy-5-methylaniline were reacted to yield N4-(1,4-benzoxazin-6-yl)-N2-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ □□□(d, 1H, J= 4 Hz), 7.25 (m, 1H), 7.14 (m, 1H), 6.80 (m, 2H), 6.82 (m, 1H), 4.29 (s, 2H), 3.35 (m, 2H), 2.20 (s, 3H); LCMS: ret. time: 17.05 min.; purity: 99 %; MS(m/e): 402 (MH^+).

7.3.231 5-Fluoro-N2-(2,3-dihydro-2-(methoxycarbonyl)benzofuran-5-yl)-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine (R926706)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine and 5-amino-2,3-dihydro-2-(methoxycarbonyl)benzofuran were reacted to yield 5-fluoro-N2-(2,3-dihydro-2-(methoxycarbonyl)benzofuran-5-yl)-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.87 (d, 1H, J= 3.0 Hz), 7.47-7.42 (m, 3H), 7.12 (dd, 1H, J= 2.4 and 8.4 Hz), 6.87 (d, 2H, J= 9.6 Hz), 6.80 (d, 1H, J= 8.7 Hz), 6.63 (d, 1H, J= 2.4 Hz), 5.21 (dd, 1H, J= 6.3 and 10.5 Hz), 4.53 (2q, 1H, J= 5.7 Hz), 3.80 (s, 3H), 3.52 (dd, 1H, J= 10.5 and 15.9 Hz), 3.35 (dd, 1H, J= 6.3 and 15.9 Hz), 1.34 (d, 6H, J= 5.7 Hz); ^{19}F NMR ($CDCl_3$): - 47664; LCMS: ret. time: 23.78 min.; purity: 95 %; MS (m/e): 439 (MH^+).

7.3.232 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine (R926699)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3-hydroxyphenyl)-5-fluoro-4-pyrimidineamine and 4-[2-(N-morpholino)ethyleneoxy]aniline were reacted to yield 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.34 (s, 1H), 9.17 (bs, 1H), 8.95 (bs, 1H), 8.02 (d, 1H, J= 3.3 Hz), 7.53 (d, 2H, J= 9.0 Hz), 7.28-7.23 (m, 1H), 7.12-7.04 (m, 2H, 6.79 (d, 2H, J= 9.0 Hz), 6.47 (dd, 1H, J= 1.2 and 5.7 Hz), 4.00 (t, 2H, J= 6.0 Hz), 3.56 (t, 4H, J= 4.5 Hz), 2.64 (t, 2H, J= 6.0 Hz), 2.44 (t, 4H, J= 4.5 Hz); ^{19}F NMR (DMSO-d6): - 46715; LCMS: ret. time: 12.66 min.; purity: 95 %; MS (m/e): 426 (MH^+).

7.3.233 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine (R926709)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-[2-(N-morpholino)ethyleneoxy]aniline were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.80 (d,

1H, J= 3.6 Hz), 7.72 (bs, 1H), 7.62 (bs, 1H), 7.41 (d, 1H, J= 9.3 Hz), 7.24 (d, 1H, J= 5.4 Hz), 7.05 (dd, 1H, J= 2.4 and 8.7 Hz), 6.84 (d, 2H, J= 8.7 Hz), 6.75 (d, 1H, J= 9.0 Hz), 4.24 (bs, 4H), 4.11 (t, 2H, J= 5.4 Hz), 3.74-3.69 (m, 4H), 2.80 (t, 2H, J= 5.4 Hz), 2.62-2.58 (m, 4H); ^{19}F NMR (CD_3OD): - 47912; LCMS: ret. time: 15.16 min.; purity: 91 %; MS (m/e): 468 (MH^+).

7.3.234 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine (R926710)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-4-pyrimidineamine and 3-aminophenol were reacted to yield 5-fluoro-N2-(3-hydroxyphenyl)-N4-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.84 (d, 1H, J= 4.2 Hz), 7.60 (d, 1H. J= 9.3 Hz), 7.09 (t, 1H, J= 2.4 Hz), 7.04-6.96 (m, 2H), 6.93 (d, 2H, J= 9.3 Hz), 6.40 (dt, 1H, J= 1.8 and 7.5 Hz), 4.15 (t, 2H, J= 5.4 Hz), 3.75-3.70 (m, 4H), 2.81 (t, 2H, J= 5.1 Hz), 2.63-2.59 (m, 4H); LCMS: ret. time: 14.16 min.; purity: 98 %; MS (m/e): 426 (MH^+).

7.3.235 N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine (R926711)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[4-[2-(N-morpholino)ethyleneoxy]phenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.80 (d, 1H, J= 4.2 Hz), 7.56 (d, 2H, J= 8.7 Hz), 7.13 (d, 1H, J= 2.4 Hz), 6.91 (d, 2H, J= 9.6 Hz), 6.86 (dd, 1H, J= 2.4 and 9.0 Hz), 6.67 (d, 1H, J= 9.0 Hz), 4.23-4.18 (m, 4H), 4.14 (t, 3H, J= 5.4 Hz), 3.74-3.70 (m, 4H), 2.82 (t, 3H, J= 5.4 Hz), 2.64-2.59 (m, 4H); ^{19}F NMR ($CDCl_3$): - 47914; LCMS: ret. time: 15.97 min.; purity: 94 %; MS (m/e): 468 (MH^+).

7.3.236 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[4-(tetrahydro-(1H)-pyrrol-1-ylsulfonyl)phenyl]-2,4-pyrimidinediamine (R926716)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-

fluoro-4-pyrimidineamine and 4-(tetrahydro-(1H)-pyrrol-1-ylsulfonyl)aniline were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[4-(tetrahydro-(1H)-pyrrol-1-ylsulfonyl)phenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.11 (bs, 1H), 9.76 (bs, 1H), 8.19 (d, 1H, J= 3.9 Hz), 7.82 (d, 2H, J= 8.7 Hz), 7.62 (d, 2H, J= 8.7 Hz), 7.27 (d, 1H, J= 2.4 Hz), 7.08 (dd, 1H, J= 2.4 and 8.7 Hz), 6.85 (d, 1H, J= 8.7 Hz), 4.23 (s, 4H), 3.10-3.06 (m, 4H), 1.64-1.58 (m, 4H); LCMS: ret. time: 22.68 min.; purity: 93 %; MS (m/e): 472 (MH^+).

7.3.237 N2-[3-[4-(2-Chloro-6-fluorobenzyl)piperazino]propyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926717)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3-[4-(2-chloro-6-fluorobenzyl)piperazino]propylamine were reacted to yield N2-[3-[4-(2-chloro-6-fluorobenzyl)piperazino]propyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.79 (d, 1H, J= 3.0 Hz), 7.37 (d, 1H, J= 2.4 Hz), 7.19-7.15 (m, 2H), 7.00-6.93 (m, 2H), 6.81 (d, 1H, J= 8.7 Hz), 6.56 (d, 1H, J= 2.7 Hz), 5.48 (bs, 1H), 4.27-4.21 (m, 4H), 3.70 (d, 2H, J= 1.8 Hz), 3.36 (q, 2H, J= 6.3 Hz), 2.68-2.35 (m, 10H), 1.75 (q, 2H, J= 6.3 Hz); ^{19}F NMR ($CDCl_3$): -31693, - 48483; LCMS: ret. time: 18.20 min.; purity: 97 %; MS (m/e): 532 (MH^+).

7.3.238 N2-(4-*tert*-Butylphenyl)-5-fluoro-N2-[2,3-dihydro-2-(methoxycarbonyl)benzofuran-5-yl]- 2,4-pyrimidinediamine (R926719)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-(4-*tert* -butylphenyl]-2-chloro-5-fluoro-4-pyrimidineamine and 5-amino-2,3-dihydro-2-(methoxycarbonyl)benzofuran were reacted to yield N2-(4-*tert*-butylphenyl)-5-fluoro-N2-[2,3-dihydro-2-(methoxycarbonyl)benzofuran-5-yl]- 2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.16 (bs, 1H), 9.84 (bs, 1H), 8.16 (d, 1H, J= 5.4 Hz), 7.56 (d, 2H, J= 8.1 Hz), 7.49 (s, 1H), 7.35 (d, 2H, J= 8.7 Hz), 7.13 (dd, 1H, J= 1.8 and 8.7 Hz), 6.78 (d, 1H, J= 8.7 Hz), 5.35 (dd, 1H, J= 6.6 and 10.5 Hz), 3.52 (dd, 1H, J= 10.5 and 16.5 Hz), 3.20 (dd, 1H, J= 6.6 and 16.5 Hz), 1.27 (s, 9H); LCMS: ret. time: 26.52 min.; purity: 96 %; MS (m/e): 437 (MH^+).

7.3.239 N4-[(5-Chloro-1-benzothiophen-3-yl)methyl]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926721)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[(5-chloro-1-benzothiophen-3-yl)methyl]-5-fluoro-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield N4-[(5-chloro-1-benzothiophen-3-yl)methyl]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.08 (d, 1H, J= 1.8 Hz), 8.02 (d, 1H, J= 8.7 Hz), 7.97 (d, 1H, J= 4.8 Hz), 7.63 (s, 1H), 7.42 (dd, 1H, J= 1.8 and 9.3 Hz), 7.07 (bs, 1H), 6.85 (dd, 1H, J= 2.4 and 8.7 Hz), 6.56 (d, 1H, J= 8.7 Hz), 4.77 (s, 1H), 4.75 (s, 1H), 4.14 (s, 4H); LCMS: ret. time: 25.89 min.; purity: 97 %; MS (m/e): 444 (MH^+).

7.3.240 N4-[(5-Chloro-1-benzothiophen-3-yl)methyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926722)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[(5-chloro-1-benzothiophen-3-yl)methyl]-5-fluoro-4-pyrimidineamine and 3-aminophenol were reacted to yield N4-[(5-chloro-1-benzothiophen-3-yl)methyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.47 (bs, 1H), 9.33 (bs, 1H), 8.78 (bs, 1), 8.11 (d, 1H, J= 2.1 Hz), 8.02 (d, 1H, J= J= 8.7 Hz), 7.98 (d, 1H, J= 4.5 Hz), 7.69 (s, 1H), 7.41 (dd, 1H, J= 1.8, 8.1 Hz), 7.07 (bs, 1H), 6.92 (d, 1H, J= 8.4 Hz), 6.82 (t, 1H, J= 8.1 Hz), 6.34 (d, 1H, J= 6.9 Hz), 4.80 (s, 1H), 4.78 (s, 1H); LCMS: ret. time: 23.32 min.; purity: 93 %; MS (m/e): 402 (MH^+).

7.3.241 N4-[2-[(2-Chloro-6-fluorobenzyl)thio]ethyl]-N2-(3,4-ethylenedioxy)-5-fluoro-2,4-pyrimidinediamine (R926723)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[2-[(2-chloro-6-fluorobenzyl)thio]ethyl]-5-fluoro-4-pyrimidineamine and 1,4-benzodioxan-6-amine were reacted to yield N4-[2-[(2-chloro-6-fluorobenzyl)thio]ethyl]-N2-(3,4-ethylenedioxy)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.09 (bs, 1H), 7.94 (bs, 1H), 7.87 (d, 1H, J= 4.2 Hz), 7.34-7.30 (m, 2H), 7.24-7.18 (m, 2H), 7.01 (dd, 1H, J= 2.4 and 8.7 Hz), 6.68 (d, 1H, J= 8.7 Hz), 4.11 (s, 4H), 3.83 (d, 2H, J= 1.2 Hz), 3.63-3.56 (m, 2H), 2.74 (t, 2H, J= 7.5 Hz); LCMS: ret. time: 25.17 min.; purity: 92 %; MS (m/e): 466 (MH^+).

7.3.242 N2-(2,3-Dihydro-1,4-benzodioxin-6-ylmethyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945168)

In a manner analogous to the preparation of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidineamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 2,3-dihydro-1,4-benzodioxin-6-ylmethylamine gave N2-(2,3-dihydro-1,4-benzodioxin-6-ylmethyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$) δ 4.24 (s, 4 H), 4.45 (d, J= 6.0 Hz, 2 H), 6.55 (ddd, J= 0.9, 2.4 and 8.4 Hz, 1 H), 6.66 (d, 1 H), 6.84 (m, 4 H), 6.90 (m, 1 H), 7.14 (t, J= 8.1 Hz, 1 H), 7.30 (m, 1 H), 7.86 (d, J= 3.3 Hz, 1 H); ^{19}F NMR (282 MHz, $CDCl_3$) δ -170.44; LCMS: ret. time: 18.33 min.; purity: 96.75%; MS (m/e): 369.03 (MH^+).

7.3.243 N4-[2-[(2-Chloro-6-fluorobenzyl)thio]ethyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926724)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[2-[(2-chloro-6-fluorobenzyl)thio]ethyl]-5-fluoro-4-pyrimidineamine and 3-aminophenol were reacted to yield N4-[2-[(2-chloro-6-fluorobenzyl)thio]ethyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (methyl sulfoxide-d_6): δ 9.76 (bs, 1H), 9.42 (bs, 1H), 8.70 (bs, 1H), 8.02 (d, 1H, J= 5.1 Hz), 7.33-7.30 (m, 2H), 7.24-7.18 (m, 1H), 7.08-6.96 (m, 2H), 6.42 (d, 1H, J= 4.6 Hz), 3.82 (d, 2H, J= 1.2 Hz), 3.68-3.61 (m, 2H), 2.77 (t, 2H, J= 7.2 Hz); LCMS: ret. time: 23.00 min.; purity: 93 %; MS (m/e): 424 (MH^+).

7.3.244 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(3-phenyl-5-methylisoxazol-4-yl)-2,4-pyrimidinediamine (R926743)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 5-methyl-3-phenyl-4-isoxazolamine were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-phenyl-5-methylisoxazol-4-yl)-2,4-pyrimidinediamine. LCMS: ret. time: 20.90 min.; purity: 96 %; MS (m/e): 420 (MH^+).

7.3.245 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(3,5-dimethylisoxazol-4-yl)-2,4-pyrimidinediamine (R926744)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3,5-dimethyl-4-isoxazolamine were reacted to yield N4-(3,4-

ethylenedioxyphenyl)-5-fluoro-N2-(3,5-dimethylisoxazol-4-yl)-2,4-pyrimidinediamine. LCMS: ret. time: 18.89 min.; purity: 98 %; MS (m/e): 358 (MH^+).

7.3.246 N2-[2-(Ethoxycarbonylmethylenethio)pyridin-5-yl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926727)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 5-amino-2-(ethoxycarbonylmethylenethio)pyridine were reacted to yield N2-[2-(ethoxycarbonylmethylenethio)pyridin-5-yl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.30 (s, 1H), 9.22 (s, 1H), 8.62 (d, 1H, J= 2.4 Hz), 8.06-8.01 (m, 2H), 7.25 (d, 1H, J= 2.4 Hz), 7.18-7.14 (m, 2H), 6.80 (d, 1H, J= 6.0 Hz), 4.22 (bs, 4H), 4.07 (q, 2H, J= 6.9 Hz), 3.95 (s, 2H), 1.14 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 21.60 min.; purity: 97 %; MS (m/e): 458(MH^+).

7.3.247 N2-[2-(Ethoxycarbonylmethyleneoxy)pyridin-5-yl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926740)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 5-amino-2-(ethoxycarbonylmethyleneoxy)pyridine were reacted to yield N2-[2-(ethoxycarbonylmethyleneoxy)pyridin-5-yl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.54 (bs, 1H), 9.14 (bs, 1H), 8.05 (s, 1H), 7.88 (d, 1H, J= 2.4 Hz), 7.54 (dd, 1H, J= 2.7 and 10.2 Hz), 7.22 (d, 1H, J= 1.8 Hz), 7.10 (dd, 1H, J= 1.8 and 8.7 Hz), 6.75 (d, 1H, J= 9.0 Hz), 6.40 (d, 1H, J= 9.9 Hz), 4.55 (s, 2H), 4.20 (bs, 4H), 4.10 (q, 2H, J= 7.2 Hz), 1.18 (t, 2H, J= 7.2 Hz).

7.3.248 5-Bromo-N2-(3,4-ethylenedioxyphenyl)-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R925797)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 5-bromo-2-chloro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield 5-bromo-N2-(3,4-ethylenedioxyphenyl)-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 9.33 (s, 1H), 9.06 (s, 1H), 8.34 (s, 1H), 8.14 (s, 1H), 7.13-7.06-(m, 4H), 6.94 (bs, 1H), 6.61 (d, 1H, J= 8.7 Hz), 6.54-6.50 (m, 1H), 4.17-4.13 (m, 4H); LCMS: ret. time: 20.01 min.; purity: 93 %; MS (m/e): 416 (MH^+).

7.3.249 N2-Allyl-5-bromo-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R925822)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 5-bromo-2-chloro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and allylamine were reacted to yield N2-allyl-5-bromo-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.08 (s, 1H), 7.21 (t, 1H, J= 8.1 Hz), 7.02-6.97 (m, 2H), 6.71 (dd, 1H, J= 2.4 and 8.7 Hz), 5.91-5.77 (m, 1H), 5.19-5.09 (m, 2H), 3.94-3.89 (m, 2H); LCMS: ret. time: 18.33 min.; purity: 99 %; MS (m/e): 322 (MH^+).

7.3.250 5-Cyano-N2-(3,4-ethylenedioxyphenyl)-N4-(methoxycarbonylbenzyl)-2,4-pyrimidinediamine (R925820)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-cyano-N4-(methoxycarbonylbenzyl)-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to yield 5-cyano-N2-(3,4-ethylenedioxyphenyl)-N4-(methoxycarbonylbenzyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.23 (s, 1H), 7.41-7.32 (m, 5H), 7.01 (d, 1H, J= 3.0 Hz), 6.86-6.71 (m, 3H), 6.54 (bs, 1H), 5.48 (d, 1H, J= 6.3 Hz), 4.31 (bs, 4H), 3.68 (s, 3H); LCMS: ret. time: 25.53 min.; purity: 97 %; MS (m/e): 418 (MH^+).

7.3.251 (R935172): N4-[4-[Ethoxycarbonyl(dimethyl)methyl]phenyl]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[4-[ethoxycarbonyl(dimethyl)methyl]phenyl]-5-fluoro-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to produce N4-[4-[ethoxycarbonyl(dimethyl)methyl]phenyl]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d_6): δ 9.31 (s, 1H), 8.97 (s, 1H), 8.03 (d, 1H, J = 3.5 Hz), 7.70 (d, 2H, J = 8.8 Hz), 7.29 (d, 1H, J = 2.3 Hz), 7.23 (d, 2H, J = 8.8 Hz), 6.98 (dd, 1H, J = 2.1 and 8.8 Hz), 6.66 (d, 1H, J = 8.2 Hz), 4.19-4.15 (m, 4H), 4.07 (qt, 2H, J = 7.0 Hz), 1.48 (s, 6H), 1.10 (t, 3H, J = 7.0 Hz). LCMS: ret. time: 24.51 min.; purity: 100%; MS (*m/e*): 453 (MH^+).

7.3.252 (R935173): N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[4-(2-hydroxy-1,1-dimethylethyl)phenyl]-2,4-pyrimidinediamine

In like manner to the preparation of N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[4(2-hydroxy-1,1-dimethylethyl)phenyl]-pyrimidine-2,4-diamine, N4-[4-[ethoxycarbonyl(dimethyl)methyl]phenyl]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine was reduced with DIBALH to give N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[4-(2-hydroxy-1,1-dimethylethyl)phenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d_6): δ 9.23 (s, 1H), 8.94 (s, 1H), 8.01 (d, 1H, J = 3.5 Hz), 7.63 (d, 2H, J = 8.8 Hz), 7.31-7.27 (m, 3H), 6.98 (dd, 1H, J= 2.9 and 8.8 Hz), 6.65 (d, 1H, J = 8.8 Hz), 4.65 (t, 1H, J = 5.3 Hz), 4.17-4.16 (m, 4H), 3.39 (d, 2H, J = 5.2 Hz), 1.20 (s, 6H). 8.9 Hz), LCMS: ret. time: 19.52 min.; purity: 100%; MS (*m/e*): 411 (MH^+).

7.3.253 R935182: 5-Fluoro-N2-[4-(methoxycarbonylmethyleneoxy)phenyl]-N4-(3,4-propylenedioxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3,4-propylenedioxyphenyl)-4-pyrimidineamine and 4-(methoxycarbonylmethyleneoxy)aniline were reacted to produce 5-fluoro-N2-[4-(methoxycarbonylmethyleneoxy)phenyl]-N4-(3,4-propylenedioxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.16 (s, 1H), 9.01 (s, 1H), 8.10 (d, 1H, J= 4.1 Hz), 7.51 (d, 2H, J= 8.8 Hz), 7.37 (d, 1H, J= 2.9 Hz), 7.32 (dd, 1H, J= 2.9 and 8.8 Hz), 6.98 (d, 1H, J= 8.3 Hz), 6.80 (d, 2H, J= 8.3 Hz), 4.70 (s, 2H), 4.12-4.05 (app qt, 4H, J= 5.3 Hz), 3.68 (s, 3H), 2.07 (q, 2H, J= 5.3 Hz); LCMS: ret. time: 20.51 min.; purity: 97%; MS (*m/e*): 441 (MH^+).

7.3.254 R935185: 5-Fluoro-N2-[3-(methoxycarbonylmethyleneoxy)phenyl]-N4-(3,4-propylenedioxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3,4-propylenedioxyphenyl)-4-pyrimidineamine and 3-(methoxycarbonylmethyleneoxy)aniline were reacted to produce 5-fluoro-N2-[3-(methoxycarbonylmethyleneoxy)phenyl]-N4-(3,4-propylenedioxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.22 (s, 1H), 9.18 (s, 1H), 8.07 (d, 1H, J= 3.5 Hz), 7.41-7.35 (m, 2H), 7.32-7.28 (m, 2H), 7.09 (t, 1H, J= 8.2 Hz), 6.90 (d, 1H, J= 8.2 Hz), 6.43 (dd, 1H, J= 2.3 and 8.8 Hz), 4.65 (s, 2H), 4.11-4.04 (app q, 4H, J= 5.3 Hz), 3.67

(s, 3H), 2.06 (q, 2H, J= 5.3 Hz); LCMS: ret. time: 20.57 min.; purity: 97%; MS (*m/e*): 441 (MH^+).

7.3.255 R935187: N4-[3-(1-Bis(ethoxycarbonyl)ethoxy)phenyl]-5-fluoro-N2-[4-isopropoxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(4-isopropoxyphenyl)-4-pyrimidineamine and 3-[1-bis(ethoxycarbonyl)ethoxy]aniline were reacted to provide N4-[3-(1-bis(ethyloxycarbonyl)ethoxy)phenyl]-5-fluoro-N2-[4-isopropoxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.08 (s, 1H), 9.98 (s, 1H), 8.19 (d, 1H, J= 4.7 Hz), 7.55 (d, 2H, J= 8.8 Hz), 7.25 (d, 1H, J= 8.8 Hz), 7.15 (d 1H, J= 8.3 Hz), 7.13 (d, 1H, J= 8.3 Hz), 6.91 (d, 2H, J= 8.8 Hz), 6.51 (dd, 1H, J= 1.7 and 8.3 Hz), 4.56 (q, 1H, J= 5.8 Hz), 4.19 (qt, 4H, J= 7.0 Hz), 1.61 (s, 3H), 1.23 (d, 6H, J= 5.8 Hz), 1.14 (t, 6H, J= 7.0 Hz); LCMS: ret. time: 15.23 min.; purity: 94%; MS (*m/e*): 527 (MH^+).

7.3.256 R935190: N4-(3,4-Ethylenedioxyphenyl)-5-fluoro -N2-(indazolin-6-yl) - 2,4-pyrimidinediamine.

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 6-aminoindazole were reacted to produce N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(indazolin-6-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.69 (s, 1H), 9.62 (s, 1H), 8.14 (d, 1H, J= 4.7 Hz), 7.93 (s, 1H), 7.92 (s, 1H), 7.60 (d, 1H, J= 8.8 Hz), 7.33-7.31 (m 1H), 7.24 (dd, 2H, J= 1.7 and 8.8 Hz), 6.79 (d, J= 8.8 Hz), 4.20 (s, 4H); LCMS: ret. time: 17.66 min.; purity: 99%; MS (*m/e*): 379 (MH^+)

7.3.257 R935191: 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(indazolin-6-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3-hydroxyphenyl)-4-pyrimidineamine and 5-aminoindazole were reacted to give 5-fluoro N4-(3-hydroxyphenyl)-N2-(indazolin-6-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.74 (s, 1H), 9.66 (s, 1H), 8.18 (d, 1H, J= 4.1 Hz), 7.95 (s, 1H), 7.93 (s, 1H), 7.59 (d, 1H, J= 8.8 Hz), 7.33-7.26 (m, 2H), 7.12-7.07 (m, 2H), 6.52 (dd, 1H, J= 2.3 and 8.2 Hz); LCMS: ret. time: 15.27 min.; purity: 99%; MS (*m/e*): 337 (MH^+)

7.3.258 R935193: N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3,4-ethylenedioxyphenyl)-4-pyrimidineamime and 1-methyl-5-aminoindazole were reacted to give N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.42 (s, 2H), 8.25 (d, 1H, J= 5.2 Hz), 7.92 (s, 1H), 7.86 (app s, 1H), 7.61 (d, 1H, J= 8.8 Hz), 7.38 (dd, 1H, J= 2.3 and 9.3Hz), 7.21 (d, 1H, J= 2.3 Hz), 7.09 (dd, 1H, J= 2.3 and 8.8 Hz). 6.79 (d, 1H, J= 8.8 Hz), 4.20 (s, 4H), 4.02 (s, 3H); LCMS: ret. time: 19.09 min.; purity: 99%; MS (*m/e*): 393 (MH^+).

7.3.259 R935194: 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(1-methy-indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3-hydroxyphenyl)-4-pyrimidineamine was reacted with 1-methyl-5-aminoindazole to produce 5-fluoro-N4-(3-hydroxyphenyl)-N2-(1-methy-indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.56 (s, 1H), 10.49 (s, 1H), 8.29 (d, 1H, J= 5.2 Hz), 7.98 (d, 1H, J= 1.7 Hz), 7.92 (s, 1H), 7.59 (d, 1H, J= 8.8 Hz), 7.36 (dd, 1H, J= 1.7 and 8.8 Hz), 7.10 (br m, 3H), 6.66 (td, 1H, J= 1.7 and 7.0 Hz), 4.01 (s, 3H). LCMS: ret. time: 16.62 min.; purity: 98%; MS (*m/e*): 351 (MH^+).

7.3.260 R935197: 5-Fluoro-N2-(indazoline-5-yl)-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine:

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(4-isopropoxyphenyl)-4-pyrimidineamine was reacted with 5-aminoindazoline to produce 5-fluoro-N2-(indazoline-5-yl)-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine.. ^{1}H NMR (DMSO-d6): δ 9.96 (s, 1H), 9.76 (s, 1H), 8.12 (d, 1H, J= 4.6 Hz), 7.94 (s, 1H), 7.92 (s, 1H), 7.53 (d, 2H, J= 9.8 Hz), 7.46 (d, 1H, J= 8.8 Hz), 7.34 (dd, 1H, J= 1.7 and 9.8 Hz), 6.83 (d, 2H, J= 9.8 Hz), 4.55 (q, 1H, J= 5.8 Hz), 1.24 (d, 6H, J= 5.8 Hz). LCMS: ret. time: 18.96 min.; purity: 100%; MS (*m/e*): 379 (MH^+).

7.3.261 R935198: N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3,4-ethylenedioxyphenyl)-4-pyrimidineamime and 5-aminoindazole were reacted to give N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.91 (s, 1H), 9.82 (s, 1H), 8.13 (d, 1H, J= 4.6 Hz), 7.94 (app s, 2H), 7.47 (d, 1H, J= 8.8 Hz), 7.36 (dd, 1H, J= 1.7 and 8.8 Hz), 7.23 (d, 1H, J= 2.3 Hz), 7.13(dd, 1H, J= 2.3 and 8.8 Hz), 6.76 (d, 1H, J= 8.8 Hz), 4.20 (s, 4H); LCMS: ret. time: 16.17 min.; purity: 99%; MS (*m/e*): 379 (MH^+).

7.3.262 R935199: 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3-hydroxyphenyl)-4-pyrimidineamime and 5-aminoindazole were reacted to give 5-fluoro-N4-(3-hydroxyphenyl)-N2-(indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.78 (s, 1H), 9.68 (s, 1H), 9.49 (br s, 1H), 8.13 (d, 1H, J= 4.6 Hz), 8.06 (s, 1H), 7.93 (s, 1H), 7.50 (d, 1H, J= 8.8 Hz), 7.38 (dd, 1H, J= 1.7 and 8.8 Hz), 7.17 (d, 1H, J= 8.2 Hz), 7.11-7.06 (m, 2H), 6.57 (dd, 1H, J= 1.1 and 8.2 Hz). LCMS: ret. time: 13.79 min.; purity: 96%; MS (*m/e*): 337 (MH^+).

7.3.263 R935203: 5-Fluoro-N2-(4-isopropoxyphenyl)-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(1-methyl-indazoline-5-yl)-4-pyrimidineamine and 4-isopropoxyaniline were reacted to produce 5-fluoro-N2-(4-isopropoxyphenyl)-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.57 (s, 1H), 10.12 (s, 1H), 8.24 (d, 1H, J= 5.3 Hz), 8.04 (s, 1H), 7.95 (s, 1H), 7.63 (d, 1H, J= 9.3 Hz), 7.55 (dd, 1H, J= 1.7 and 8.8 Hz), 7.30 (d, 2H, J= 9.4 Hz), 6.82 (d, 2H, J= 8.8 Hz), 4.53 (q, 1H, J= 6.4 Hz), 4.02 (s, 3H), 1.22 (d, 6H, J= 6.4 Hz). LCMS: ret. time: 20.56 min.; purity: 99%; MS (*m/e*): 393 (MH^+).

7.3.264 R935204: 5-Fluoro-N2-(3-hydroxyphenyl)-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(1-methyl-indazoline-5-yl)-4-pyrimidineamine and 3-aminophenol were reacted to produce 5-fluoro-N2-(3-hydroxyphenyl)-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine.. LCMS: ret. time: 15.55 min.; purity: 98%; MS (*m/e*): 351 (MH^+).

7.3.265 R935207: N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(2-methoxycarbonyl-fur-4-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro- N-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine was reacted with 4-(4-aminophenoxymethyl)-2-methoxycarbonyl-furan to give N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(2-methoxycarbonyl-fur-4-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.48 (s, 1H), 9.41 (s, 1H), 8.08 (d, 1H, J= 3.4 Hz), 7.37-7.10 (m, 6H), 6.74 (d, 2H, J= 8.2 Hz), 6.61 (d, 1H, J= 8.2 Hz), 5.00 (s, 2H), 4.19 (br s, 4H), 3.79 (s, 3H). LCMS: ret. time: 22.85 min.; purity: 97%; MS (*m/e*): 493 (MH^+).

7.3.266 R935208: N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3,4-ethylenedioxyphenyl)-4-pyrimidineamine was reacted with 6-amino-1-(methoxycarbonyl)methyl-indazoline to produce N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.39 (s, 1H), 9.19 (s, 1H), 8.08 (d, 1H, J= 3.5 Hz), 7.95 (s, 1H), 7.91 (s, 1H), 7.56 (d, 1H, J= 8.2 Hz), 7.32 (d, 2H, J= 8.9 Hz), 7.22 (dd, 1H, J= 2.9 and 8.2 Hz), 6.78 (d, 1H, J= 8.8 Hz), 5.06 (s, 2H), 4.21 (s, 4H), 3.61 (s, 3H). LCMS: ret. time: 19.39 min.; purity: 93%; MS (*m/e*): 451 (MH^+).

7.3.267 R935209: 5-Fluoro-N2-[4-(methoxycarbonylmethyleneoxy)phenyl]-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(1-methyl-indazoline-5-yl)-4-pyrimidineamine and 4-(methoxycarbonylmethyleneoxy)aniline were reacted to provide 5-fluoro-N2-[4-(methoxycarbonylmethyleneoxy)phenyl]-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.31 (s, 1H), 8.99 (s, 1H), 8.17 (s, 1H), 8.02 (d, 1H, J= 3.5 Hz), 7.92 (s, 1H), 7.59 (s, 2H), 7.50 (d, 2H, J= 8.8 Hz), 6.73 (d, 2H, J= 8.8 Hz), 4.69 (s, 2H), 4.03 (s, 3H), 3.68 (s, 3H). LCMS: ret. time: 17.60 min.; purity: 99%; MS (*m/e*): 423 (MH^+).

7.3.268 R935214: 5-Fluoro-N2-(3,5-dimethoxyphenyl)-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(1-methyl-indazoline-5-yl)-4-pyrimidineamine and 3,5-dimethoxyaniline were reacted to produce 5-fluoro-N2-(3,5-dimethoxyphenyl)-N4-(1-methyl-indazoline-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.34 (s, 1H), 9.09 (s, 1H), 8.20 (d, 1H, J= 5.3 Hz), 8.07 (d, 1H, J= 3.5 Hz), 7.90 (s, 1H), 7.63-7.55 (m, 2H), 6.89 (d, 2H, J= 1.7 Hz), 6.02 (t, 1H, J= 2.3 Hz), 4.02 (s, 3H), 3.54 (s, 6H). LCMS: ret. time: 18.81 min.; purity: 97%; MS (*m/e*): 395 (MH^+).

7.3.269 R935215: 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3-hydroxyphenyl)-4-pyrimidineamine was reacted with 6-amino-1-(methoxycarbonyl)methyl-indazoline to produce 5-fluoro-N4-(3-hydroxyphenyl)-N2-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 16.08 min.; purity: 90%; MS (*m/e*): 408 (MH^+).

7.3.270 R935218: 5-Fluoro-N2-(4-isopropoxyphenyl)-N4-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-[1-(methoxycarbonyl)methyl-

indazoline-6-yl]-4-pyrimidineamine was reacted with 4-isopropoxyaniline to provide 5-fluoro-N2-(4-isopropoxyphenyl)-N4-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.47 (s, 1H), 8.99 (s, 1H), 8.10 (s, 1H), 8.07 (d, 1H, J= 4.1 Hz), 8.02 (s, 1H), 7.68 (d, 1H, J= 8.8 Hz), 7.50-7.46 (m, 3H), 6.74 (d, 2H, 8.8 Hz), 5.26 (s, 2H), 4.47 (q, 1H, J= 5.8 Hz), 3.62 (s, 3H), 1.21 (d, 6H, J= 5.8 Hz). LCMS: ret. time: 21.76 min.; purity: 97%; MS (*m/e*): 451 (MH^+).

7.3.271 R935219: N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-4-pyrimidineamine was reacted with 3,4-ethylenedioxyaniline to provide N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.48 (s, 1H), 9.01 (s, 1H), 8.10 (s, 1H), 8.09 (d, 1H, J= 3.5 Hz), 8.01 (s, 1H), 7.68 (d, 1H, J= 8.8 Hz), 7.48-7.43 (m, 1H), 7.29 (d, 1H, J= 2.3 Hz), 6.99 (d, 1H, J= 2.3 and 8.2 Hz), 6.67 (dd, 1H, J= 2.3 and 8.8 Hz), 5.27 (s, 2H), 4.15 (s, 4H), 3.62 (s, 3H). LCMS: ret. time: 18.99 min.; purity: 93%; MS (*m/e*): 451 (MH^+).

7.3.272 R935220: 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-4-pyrimidineamine was reacted with 3-aminophenol to provide 5-fluoro-N2-(3-hydroxyphenyl)-N4-[1-(methoxycarbonyl)methyl-indazoline-6-yl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.51 (s, 1H), 9.19 (s, 1H), 9.10(s, 1H), 8.21 (s, 1H), 8.12 (d, 1H, J= 3.5 Hz), 8.02 (s, 1H), 7.68 (d, 1H, J= 8.8 Hz), 7.49-7.45 (m 1H), 7.16 (s, 1H), 7.09 (d, 1H, J= 7.6 Hz), 6.95 (app t, 1H, J= 7.6 and 8.2 Hz), 6.31 (dd, 1H, J= 1.7 and 7.6 Hz), 5.29 (s, 2H), 3.62 (s, 3H). LCMS: ret. time: 16.16 min.; purity: 97%; MS (*m/e*): 409 (MH^+).

7.3.273 N4-(3,4-Ethylenedioxyphenyl)-N2-(3-furanylmethylene)-5-fluoro-2,4-pyrimidinediamine (R950203)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3-aminomethylenefurane were reacted to give N4-(3,4-ethylenedioxyphenyl)-N2-(3-furanylmethylene)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 19.99 min.; purity: 88.4%; MS (m/e): 343.07 (MH^+).

7.3.274 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[(4-methoxyphenyloxy)ethyl]-2,4-pyrimidinediamine (R950204)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2-(4-methoxyphenyloxy)ethyl amine were reacted to give N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[(4-methoxyphenyloxy)ethyl]-2,4-pyrimidinediamine. LCMS: ret. time: 22.74 min.; purity: 91.9%; MS (m/e): 413.05 (MH^+).

7.3.275 N2-[2,3-Dihydrobenzo[b]furan-5-ylmethyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950205)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2,3-dihydrobenzo[b]furan-5-ylmethylamine were reacted to give N2-[2,3-dihydrobenzo[b]furan-5-ylmethyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 21.43 min.; purity: 97.5%; MS (m/e): 395.05 (MH^+).

7.3.276 N2-(2,3-Dihydro-1,4-benzodioxin-2-ylmethyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950206)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxyearbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2,3-dihydro-1,4-benzodioxin-2-ylmethylamine were reacted to give N2-(2,3-dihydro-1,4-benzodioxin-2-ylmethyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 22.49 min.; purity: 87.6%; MS (m/e): 411.01 (MH^+).

7.3.277 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[2-(methylthio)-1,3-benzothiaz-6-yl]-2,4-pyrimidinediamine (R950201)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxyearbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2-(methylthio)-1,3-benzothiazol-6-amine were reacted to give N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[2-(methylthio)-1,3-benzothiaz-6-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 22.67 min.; purity: 76.9%; MS (m/e): 441.91 (MH^+).

7.3.278 N2-[2,3-Dihydrobenzo[b]furan-5-ylmethyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R950213)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 2,3-dihydrobenzo[b]furan-5-ylmethylamine were reacted to N2-[2,3-dihydrobenzo[b]furan-5-ylmethyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 17.80 min.; purity: 99.2%; MS (m/e): 353.08 (MH^+).

7.3.279 N2-(2,3-Dihydro-1,4-benzodioxin-2-ylmethyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R950214)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 2,3-dihydro-1,4-benzodioxin-2-ylmethylamine were reacted to give N2-(2,3-dihydro-1,4-benzodioxin-2-ylmethyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 19.26 min.; purity: 96.2%; MS (m/e): 369.08 (MH^+).

7.3.280 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[2-(methylthio)-1,3-benzothiaz-6-yl)-2,4-pyrimidinediamine (R950212)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxyearbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 2-(methylthio)-1,3-benzothiazol-6-amine were reacted to give 5-fluoro-N4-(3-hydroxyphenyl)-N2-[2-(methylthio)-1,3-benzothiaz-6-yl)-2,4-pyrimidinediamine. LCMS: ret. time: 19.83 min.; purity: 98.9%; MS (m/e): 399.98 (MH^+).

7.3.281 N2-(3-Aminophenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R950227)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 1,3-diaminobenzene were reacted to give N2-(3-aminophenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 11.89 min.; purity: 97.6%; MS (m/e): 312.05 (MH^+).

7.3.282 N2-(1,4-Benzoxazin-6-yl)]-5-fluoro-N4-(3-nitrophenyl)-2,4-pyrimidinediamine (R950253)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 6-amino-1,4-benzoxazine were reacted to give N2-(1,4-benzoxazin-6-yl)]-5-fluoro-N4-(3-nitrophenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 18.52 min.; purity: 99.5%; MS (m/e): 382.93 (MH^+).

7.3.283 N2-(Ethoxycarbonylmethyleneaminophenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R950215)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 3-ethoxycarbonylmethyleneaminophenylaniline were reacted to N2-(ethoxycarbonylmethyleneaminophenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 18.90 min.; purity: 83.4%; MS (m/e): 398.06 (MH^+).

7.3.284 N2-(Ethoxycarbonylmethyleneaminophenyl)-5-fluoro-N4-[3-(2-hydroxyethylamino)phenyl]-2,4-pyrimidinediamine (R950229)

In like manner to the preparation of N4-(3-aminophenyl)-N2-[2-(methoxycarbonyl)-benzofurane-5-yl]-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 3-ethoxycarbonylmethyleneaminophenylaniline were reacted to N2-(ethoxycarbonylmethyleneaminophenyl)-5-fluoro-N4-[3-(2-hydroxyethylamino)phenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 16.37 min.; purity: 78.3%; MS (m/e): 441.03 (MH^+).

7.3.285 5-Cyano-N2-(3-hydroxyphenyl)-N4-(methoxycarbonylbenzyl)-2,4-pyrimidinediamine (R925821)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-cyano-N4-(methoxycarbonylbenzyl)-4-pyrimidineamine and 3-hydroxyaniline were reacted to yield 5-cyano-N2-(3-hydroxyphenyl)-N4-(methoxycarbonylbenzyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.27 (s, 1H), 7.38-7.28 (m, 5H), 7.19-7.07 (m, 2H), 6.98-6.91 (m, 2H), 6.64 (d, 1H, J= 6.6 Hz), 3.55 (s, 3H); LCMS: ret. time: 24.18 min.; purity: 98 %; MS (m/e): 376 (MH^+).

7.3.286 5-Fluoro-N4-[2-fluoro-4-(methoxymethyleneoxy)phenyl]-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926680)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(2-fluoro-4-methoxymethyleneoxyphenyl)-4-pyrimidineamine and 3-hydroxyaniline were reacted to yield 5-fluoro-N4-(2-fluoro-4-methoxymethyleneoxyphenyl)-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine.

7.3.287 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[(1H)-indol-5-yl]-2,4-pyrimidinediamine (R926748)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 5-aminoindole were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[(1H)-indol-5-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 20.37 min.; purity: 97 %; MS (m/e): 378 (MH^+).

7.3.288 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[(1H)-indol-5-yl]-2,4-pyrimidinediamine (R926749)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 5-aminoindole were reacted to yield 5-fluoro-N4-(3-hydroxyphenyl)-N2-[(1H)-indol-5-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 17.31 min.; purity: 94 %; MS (m/e): 366 (MH^+).

7.3.289 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[(1H)-indol-6-yl]-2,4-pyrimidinediamine (R926750)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 6-aminoindole were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[(1H)-indol-6-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 20.80 min.; purity: 91 %; MS (m/e): 378 (MH^+).

7.3.290 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[(1H)-indol-6-yl]-2,4-pyrimidinediamine (R926751)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 6-aminoindole were reacted to yield 5-fluoro-N4-(3-hydroxyphenyl)-N2-[(1H)-indol-6-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 18.13 min.; purity: 96 %; MS (m/e): 336 (MH^+).

7.3.291 N4-[4-(Aminocarbonylmethyleneoxy)phenyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945063)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 3-hydroxyaniline (110 mg, 1 mmol) and N4-[4-(aminocarbonylmethyleneoxy)phenyl]-2-chloro-5-fluoro-4-pyrimidineamine (80 mg, 0.27 mmol) gave N4-[4-(aminocarbonylmethyleneoxy)phenyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (75 mg, 76%). ^{1}H NMR (acetone-d_6): δ δ 4.51 (s, 2 H), 6.64 (dm, J= 8.4 Hz, 1 H), 7.06-7.14 (m, 5 H), 7.70 (dd, J= 2.4 and 9.0 Hz, 2 H), 8.27 (d, J= 6.0 Hz, 1 H); ^{19}F NMR (282 MHz, acetone-d_6): δ - 164.00; LCMS: ret. time: 14.66 min.; purity: 88.63%; MS (m/e): 370.00 (MH^+).

7.3.292 N4-[4-(Cyanomethyleneoxy)phenyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945071)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 3-hydroxyaniline (94 mg, 0.86 mmol) and 2-chloro-N4-[4-(cyanomethyleneoxy)phenyl]-5-fluoro-4-pyrimidineamine (80 mg, 0.29 mmol) gave N4-[4-(cyanomethyleneoxy)phenyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (65 mg, 64%) as a off-white solid. ^{1}H NMR (acetone-d_6): δ 5.16 (s, 2 H), 6.64 (ddd, J= 1.8, 2.4 and 7.5 Hz, 1 H), 7.03 (t, J= 2.1 Hz, 1 H), 7.08-7.16 (m, 2 H),

7.19 (d, J= 9.3 Hz, 2 H), 7.77 (d, J= 9.3 Hz, 2 H), 8.30 (d, J= 5.4 Hz, 1 H), 10.04 (s, 1 H, NH), 11.33 (s, 1 H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 163.52; LCMS: ret. time: 17.08 min.; purity: 100%; MS (m/e): 352.13 (MH^+).

7.3.293 N4-(3-Cyanophenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945109)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 3-aminobenzonitrile (142 mg, 1.2 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave 2-chloro-N4-(3-cyanophenyl)-5-fluoro-4-pyrimidineamine (128 mg, 86%) as a white solid. The reaction of 2-chloro-N4-(3-cyanophenyl)-5-fluoro-4-pyrimidineamine (50 mg, 0.2 mmol) and 3-aminophenol (66 mg, 0.6 mmol) gave N4-(3-cyanophenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (40 mg, 62%). ^{1}H NMR (acetone-d_6): δ 6.48 (ddd, J= 0.9, 2.4 and 7.8 Hz, 1 H), 7.10 (t, J= 8.1 Hz, 1 H), 7.18 (ddd, J= 1.2, 2.1 and 8.1 Hz, 1 H), 7.33 (t, J= 2.1 Hz, 1 H), 7.45 (dt, J= 1.2 and 7.8 Hz, 1 H), 7.54 (t, J= 8.1 Hz, 1 H), 8.08 (d, J= 3.3 Hz, 1 H), 8.14 (ddd, J= 1.5, 2.7 and 8.4 Hz, 1 H), 8.39 (t, J= 2.1 Hz, 1 H), 8.58 (s, 1 H, NH), 8.84 (s, 1 H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 167.41; LCMS: ret. time: 17.75 min.; purity: 92.39%; MS (m/e): 322.59 (MH^+).

7.3.294 N4-(3-Cyanophenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945110)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3-cyanophenyl)-5-fluoro-4-pyrimidineamine (50 mg, 0.2 mmol) and 4-(methoxycarbonylmethyleneoxy)aniline (109 mg, 0.6 mmol) gave N4-(3-cyanophenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (30 mg, 38%). ^{1}H NMR (acetone-d_6): δ 3.74 (s, 3 H), 4.72 (s, 2 H), 6.93 (d, J= 9.0 Hz, 2 H), 7.46 (dt, J= 1.5 and 7.5 Hz, 1 H), 7.54 (t, J= 7.8 Hz, 1 H), 7.60 (dd, J= 1.8 and 9.0 Hz, 2 H), 8.03-8.07 (m, 2 H), 8.43 (m, 1 H), 8.48 (br, 1 H, NH), 8.80 (br, 1 H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 168.2; LCMS: ret. time: 20.24 min.; purity: 94.79%; MS (m/e): 393.98 (MH^+).

7.3.295 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[2-(indol-3-yl)ethyl]-2,4-pyrimidinediamine (R945117)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (50 mg, 0.21 mmol) and tryptamine (100 mg, 0.62 mmol) gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-[2-(indol-3-yl)ethyl]-2,4-pyrimidinediamine (40 mg, 53%). ^{1}H NMR (CD_3OD): δ 3.01 (t, J= 7.2 Hz, 2 H), 3.61 (t, J= 7.2 Hz, 2 H), 6.51 (ddd, J= 0.9, 2.1 and 8.1 Hz, 1 H), 6.96 (td, J= 0.9 and 7.2 Hz, 1 H), 7.03-7.09 (m, 3 H), 7.22 (d, J= 7.5 Hz, 1 H), 7.28-7.32 (m, 2 H), 7.53 (d, J= 7.8 Hz, 1 H), 7.72 (d, J= 4.5 Hz, 1 H); ^{19}F NMR (282 MHz, CD_3OD): δ - 171.72; LCMS: ret. time: 20.17 min.; 95.66%; MS (m/e): 364.05 (MH^+).

7.3.296 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945118)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (80 mg, 0.33 mmol) and 3-methoxycarbonylmethyleneoxyaniline (180 mg, 0.99 mmol) gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (130 mg). ^{1}H NMR (acetone-d_6): δ 3.74 (s, 3 H), 4.64 (s, 2 H), 6.71 (m, 1 H), 6.80 (m, 1 H), 7.23-7.32 (m, 6 H), 8.32 (d, J= 5.1 Hz, 1 H); LCMS: ret. time: 18.37 min.; purity: 100%; MS (m/e): 384.70 (MH^+).

7.3.297 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945124)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine (80 mg, 0.28 mmol) and 3-methoxycarbonylmethyleneoxyaniline (154 mg, 0.85 mmol) gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (90 mg, 74%). ^{1}H NMR ($CDCl_3$): δ 3.80 (s, 3H), 4.27 (q, J= 0.9 Hz, 4H), 4.58 (s, 2H), 6.54 (ddd, J= 0.9, 2.7 and 8.1 Hz, 1H), 6.65 (d, J= 2.7 Hz, 1H), 6.86 (d, J= 8.7 Hz, 1H), 6.98 (dd, J= 2.4 and 8.4 Hz, 1H), 6.98 (br, 1 H), 7.09 (ddd, J= 1.2, 2.1 and

8.1 Hz, 1H), 7.18 (t, J= 8.1 Hz, 1H), 7.24 (d, J= 2.4 Hz, 1H), 7.32 (t, J= 2.1 Hz, 1H), 7.92 (d, J= 3.3 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.52; LCMS: ret. time: 21.64 min.; purity: 98.07%; MS (m/e): 426.99 (MH^+).

7.3.298 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945125)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine (80 mg, 0.28 mmol) and methyl 3-aminophenoxyacete (154 mg, 0.85 mmol) gave 5-fluoro-N4-(4-isopropoxyphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (80 mg, 66%). ^{1}H NMR ($CDCl_3$) δ 1.33 (s, 3H), 1.35 (s, 3H), 3.80 (s, 3H), 4.52 (p, J= 6.0 Hz, 1H), 4.55 (s, 2H), 6.53 (ddd, J= 0.9, 2.4 and 8.1 Hz, 1H), 6.69 (d, J= 2.4 Hz, 1H), 6.90 (d, J= 9.0 Hz, 2H), 7.04-7.08 (m, 2H), 7.16 (t, J= 8.1 Hz, 1H), 7.32 (t, J= 2.1 Hz, 1H), 7.47 (d, J= 8.7 Hz, 2H), 7.92 (d, J= 3.0 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.64; LCMS: ret. time: 24.70 min.; purity: 100%; MS (m/e): 427.00 (MH^+).

7.3.299 N2-[4-(Aminocarbonylmethyleneoxy)phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945064)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-N2-(3-hydroxyphenyl))-5-fluoro-2,4-pyrimidinediamine, 4-(aminocarbonylmethyleneoxy)aniline (198 mg, 1.2 mmol) and 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (95 mg, 0.4 mmol) gave N2-[4-(aminocarbonylmethyleneoxy)phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (60 mg, 41%). ^{1}H NMR (CD_3OD): δ 4.55 (s, 2H), 6.75 (dm, J= 7.5 Hz, 1H), 7.08 (d, J= 9.3 Hz, 2H), 7.18 (m, 2H), 7.22 (d, J= 8.7 Hz, 1H), 7.46 (d, J= 9.0 Hz, 2H), 8.09 (d, 1H); LCMS: ret. time: 14.38 min.; purity: 100%; MS (m/e): 370.00 (MH^+).

7.3.300 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945132)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyaniline (490 mg, 2.4 mmol) and 2,4-dichloro-5-fluoropyrimidine (200

mg, 1.2 mmol) gave 2-chloro-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-4-pyrimidineamine. The reaction of 2-chloro-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-4-pyrimidineamine (40 mg, 0.12 mmol) and 3-aminophenol (40 mg, 0.36 mmol) gave 5-fluoro-N2-(3-hydroxyphenyl)-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (30 mg, 62%). ^{1}H NMR ($CDCl_3$): δ 2.61 (s, 3H), 5.21 (s, 2H), 6.50 (ddd, J= 0.9, 2.4 and 7.8 Hz, 1H), 6.76 (ddd, J= 0.6, 2.4 and 9.0 Hz, 1H), 6.80-6.85 (m, 3H), 7.12 (t, J= 8.1 Hz, 1H), 7.23 (t, J= 7.8 Hz, 1H), 7.50-7.52 (m, 2H), 7.94 (d, J= 3.3 Hz, 1H), 7.98 (t, J= 2.4 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.19; LCMS: ret. time: 18.88 min.; purity: 100%; MS (m/e): 408.97 (MH^+).

7.3.301 N2-[4-(Aminocarbonylmethoxy)phenyl]-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945133)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-4-pyrimidineamine (30 mg, 0.09 mmol) and 4-(aminocarbonylmethyleneoxy)aniline (45 mg, 0.27 mmol) gave N2-[4-(aminocarbonylmethyleneoxy)phenyl]-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (10 mg, 24%). ^{1}H NMR (acetone-d_6): δ 2.62 (s, 3H), 4.43 (s, 2H), 5.19 (s, 2H), 6.77 (ddd, J= 1.2, 2.4 and 8.1 Hz, 1H), 6.94 (d, J= 9.0 Hz, 2H), 7.25 (t, J= 8.1 Hz, 1H), 7.34 (ddd, J= 0.9, 1.8, 9.0 Hz, 1H), 7.68 (d, J= 9.0 Hz, 2H), 7.81 (t, J= 2.1 Hz, 1H), 7.99 (d, J= 3.6 Hz, 1H), 8.45 (br, 1H, NH), 8.57 (br, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 168.20; LCMS: ret. time: 16.80 min.; purity: 84.91%; MS (m/e): 466.05 (MH^+).

7.3.302 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945128)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine (40 mg, 0.14 mmol) and 3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyaniline (87 mg, 0.42 mmol) gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-

yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (30 mg, 47%). ^{1}H NMR ($CDCl_3$): δ 2.62 (s, 3H), 4.26 (q, J= 2.1 Hz, 4H), 5.09 (s, 2H), 6.63-6.67 (m, 2H), 6.85 (d, J= 8.4 Hz, 1H), 6.95-6.99 (m, 2H), 7.09 (dt, J= 0.9 and 6.9 Hz, 1H), 7.19 (t, J= 8.4 Hz, 1H), 7.23 (d, J= 2.4 Hz, 1H), 7.42 (t, J= 2.4 Hz, 1H), 7.92 (d, J= 3.0 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.47; LCMS: ret. time: 21.26 min.; purity: 96.72%; MS (m/e): 451.01 (MH^+).

7.3.303 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945129)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine (40 mg, 0.14 mmol) and 3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyaniline (87 mg, 0.42 mmol) gave 5-fluoro-N4-(4-isopropoxyphenyl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (40 mg, 63%). ^{1}H NMR ($CDCl_3$): δ 1.32 (s, 3H), 1.34 (s, 3H), 2.61 (s, 3H), 4.52 (p, J= 6.0 Hz, 1H), 5.08 (s, 2H), 6.64 (ddd, J= 1.2, 2.7 and 8.1 Hz, 1 H), 6.70 (d, J= 2.4 Hz, 1H), 6.89 (d, J= 9.0 Hz, 2H), 7.07-7.11 (m, 2H), 7.16 (t, J= 8.1 Hz, 1H), 7.38 (t, J= 2.1 Hz, 1H), 7.46 (d, J= 9.0 Hz, 2H), 7.91 (d, J= 3.3 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.55; LCMS: ret. time: 24.49 min.; 96.15%; MS (m/e): 451.08 (MH^+).

7.3.304 N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945137)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-4-pyrimidineamine (40 mg, 0.12 mmol) and 3,4-ethylenedioxyaniline (55 mg, 0.36 mmol) reacted to give N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 2.60 (s, 3H), 4.24 (q, J= 2.7 Hz, 4H), 5.21 (s, 2H), 6.74-6.78 (m, 2H), 6.81 (d, J= 8.4 Hz, 1H), 6.90 (dd, J= 1.2, 7.8 Hz, 1H), 7.01 (dd, J= 2.4 and 8.4 Hz, 1H), 7.22 (t, J= 8.4 Hz, 1H), 7.30 (d, J= 2.4 Hz, 1H), 7.48 (br, 1H), 7.94 (d, J= 3.3 Hz, 1H), 7.98 (br, 1H); ^{19}F NMR (282 MHz, $CDCl_3$) δ - 168.23; LCMS: ret. time: 21.20 min.; purity: 91.09%; MS (m/e): 450.99 (MH^+).

7.3.305 5-Fluoro-N2-(4-isopropoxyphenyl)-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945138)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-4-pyrimidineamine (40 mg, 0.12 mmol) and 4-isopropoxyaniline (55 mg, 0.36 mmol) gave 5-fluoro-N2-(4-isopropoxyphenyl)-N4-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 1.31 (s, 3H), 1.33 (s, 3H), 2.60 (s, 3H), 4.48 (p, J= 6.0 Hz, 1H), 5.20 (s, 2H), 6.74-6.78 (m, 2H), 6.87 (d, J= 9.0 Hz, 2H), 6.92 (dd, J= 1.2 and 8.4 Hz, 1H), 7.22 (t, J= 8.4 Hz, 1H), 7.50 (m, 3H), 7.94 (d, J= 3.0 Hz, 2H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 168.46; LCMS: ret. time: 24.95 min.; purity: 73.74%; MS (m/e): 451.06 (MH^+).

7.3.306 N4-(3,5-Dimethyl-4-hydroxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945139)

Using general hydrogenation conditions, 2,6-dimethyl-4-nitrophenol was reduced to 4-amino-2,6-dimethylphenol. In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 4-amino-2,6-dimethylphenol (823 mg, 6 mmol) and 2,4-dichloro-5-fluoropyrimidine (500 mg, 3 mmol) gave 2-chloro-N4-(3,5-dimethyl-4-hydroxyphenyl)-5-fluoro-4-pyrimidineamine. Compound 2-chloro-N4-(3,5-dimethyl-4-hydroxyphenyl)-5-fluoro-4-pyrimidineamine (500 mg, 1.87 mmol) and 3-(methoxycarbonylmethyleneoxy)aniline (500 mg, 2.76 mmol) reacted to give N4-(3,5-dimethyl-4-hydroxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (500 mg, 65%). ^{1}H NMR (CD_3OD): δ 2.16 (s, 6H), 3.76 (s, 3H), 4.51 (s, 2H), 6.79 (ddd, J= 0.9, 2.4 and 8.1 Hz, 1H), 7.01-7.06 (m, 2H), 7.15 (s, 2H), 7.26 (t, J= 8.1 Hz, 1H), 7.93 (d, J= 5.7 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ - 163.31; LCMS: ret. time: 20.44 min.; purity: 84.25%; MS (m/e): 413.03 (MH^+).

7.3.307 N4-(Benzothiophen-3-ylmethyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945146)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of benzothiophen-3-ylmethylamine (244 mg, 1.5 mmol) and 2,4-dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol)

gave N4-(benzothiophen-3-ylmethyl)-2-chloro-5-fluoro-4-pyrimidineamine. The reaction of N4-(benzothiophen-3-ylmethyl)-2-chloro-5-fluoro-4-pyrimidineamine and 3-aminophenol (200 mg, 1.83 mmol) gave N4-(benzothiophen-3-ylmethyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. (40 mg, 36%). ^{1}H NMR ($CDCl_3$): δ 4.45 (br, 1H), 4.95 (dd, J= 1.2 and 5.4 Hz, 2H), 5.33 (br, 1H), 6.40 (ddd, J= 1.2, 2.4 and 8.1 Hz, 1H), 6.85 (ddd, J= 0.9, 2.1 and 8.1 Hz, 1H), 6.91 (br, 1H), 7.05 (t, J= 8.1 Hz, 1H), 7.26 (m, 1H), 7.39-7.47 (m, 3H), 7.81 (dd, J= 1.2 and 5.1 Hz, 1H), 7.84 (d, J= 3.3 Hz, 1H), 7.92 (m, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 168.89; LCMS: ret. time: 21.91 min.; purity: 99.34%; MS (m/e): 366.96 (MH^+).

7.3.308 5-Fluoro-N2-(3-hydroxyphenyl)-N4-(3-pyridylmethyl)-2,4-pyrimidinediamine (R945147)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 3-pyridylmethylamine (162 mg, 1.5 mmol) and 2,4-dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol) were reacted to give 2-chloro-5-fluoro-N4-(3-pyridylmethyl)-4-pyrimidineamine. Then 2-chloro-5-fluoro-N4-(3-pyridylmethyl)-4-pyrimidineamine and 3-aminophenol (200 mg, 1.83 mmol) reacted to give 5-fluoro-N2-(3-hydroxyphenyl)-N4-(3-pyridylmethyl)-2,4-pyrimidinediamine (40 mg, 43%). ^{1}H NMR (CD_3OD): δ 4.71 (s, 2H), 6.38 (ddd, J= 0.9, 2.4 and 8.1 Hz, 1H), 6.88 (ddd, J= 0.9, 2.1 and 8.1 Hz, 1H), 7.00 (t, J= 8.1 Hz, 1H), 7.14 (t, J= 2.4 Hz, 1H), 7.37 (dd, J= 4.8 and 7.8 Hz, 1H), 7.73 (d, J= 3.6 Hz, 1H), 7.87 (dt, J= 2.1 and 7.5 Hz, 1H), 8.39 (dd, J= 1.2 and 7.8 Hz, 1H), 8.57 (d, J= 2.1 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ - 170.99; LCMS: ret. time: 8.82 min.; purity: 92.90%; MS (m/e): 312.05 (MH^+).

7.3.309 N4-(3-Chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945148)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 4-amino-2-chloro-6-methylphenol and 2,4-dichloro-5-fluoropyrimidine resulted 2-chloro-N4-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-4-pyrimidineamine. The reaction of 2-chloro-N4-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-4-pyrimidineamine and 3-methoxycarbonylmethyleneoxyaniline (1.95 g, 11 mmol) gave N4-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (850 mg, 55%). ^{1}H NMR

(CD_3OD): δ 2.22 (s, 3H), 3.76 (s, 3H), 4.52 (s, 2H), 6.50 (dt, J= 2.7 and 6.3 Hz, 1H), 7.09-7.14 (m, 2H), 7.24 (t, J= 1.8 Hz, 1H), 7.30 (t, J= 1.2 Hz, 1H), 7.49 (d, J= 2.4 Hz, 1H), 7.88 (d, J= 3.9 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ - 168.70; LCMS: ret. time: 20.63 min.; purity: 98.56%; MS (m/e): 432.96 (MH^+).

7.3.310 N4-[(2,5-Dimethyl-3-furyl)methyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945151)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of (2,5-dimethyl-3-furyl)methylamine (188 mg, 1.5 mmol) and 2,4-dichloro-5-fluoropyrimidine (50 mg, 0.3 mmol) gave 2-chloro-N4-[(2,5-dimethyl-3-furyl)methyl]-5-fluoro-4-pyrimidineamine. The reaction of 2-chloro-N4-[(2,5-dimethyl-3-furyl)methyl]-5-fluoro-4-pyrimidineamine and 3-aminophenol (200 mg, 1.83 mmol) gave N4-[(2,5-dimethyl-3-furyl)methyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (50 mg, 51%). ^1H NMR ($CDCl_3$): δ 2.22 (s, 3H), 2.23 (s, 3H), 4.39 (d, J= 5.1 Hz, 2H), 5.24 (br, 1H), 5.90 (s, 1H), 6.52 (d, J= 6.6 Hz, 1H), 6.99 (d, J= 8.1 Hz, 1H), 7.13 (t, J= 8.1 Hz, 1H), 7.29 (s, 1H), 7.71 (m, 2H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.84; LCMS: ret. time: 19.83 min.; purity: 96.32%; MS (m/e): 329.05 (MH^+).

7.3.311 N4-(3,5-Dimethyl-4-methoxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945153)

In a manner analogous to the preparation of N2,N4-bis[3-methoxy-4-(methoxycarbonyl)phenyl]-5-fluoro-2,4-pyrimidinediamine, the reaction of 2,6-dimethyl-4-nitrophenol (1.67 g, 10 mmol), potassium carbonate (13 g, 0.1 mol) and iodomethane (2.5 mL, 50 mmol) gave 2,6-dimethyl-1-methoxy-4-nitrobenzene. Hydrogenation of 2,6-dimethyl-1-methoxy-4-nitrobenzene gave 3,5-dimethyl-4-methoxyaniline.

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-N2-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 3,5-dimethyl-4-methoxyaniline (400 mg, 2.6 mmol) and 2,4-dichloro-5-fluoropyrimidine (200 mg, 1.2 mmol) gave 2-chloro-N4-(3,5-dimethyl-4-methoxyphenyl)-5-fluoro-4-pyrimidineamine. The reaction of 2-chloro-N4-(3,5-dimethyl-4-methoxyphenyl)-5-fluoro-4-pyrimidineamine and 3-(methoxycarbonylmethyleneoxy)aniline (650 mg, 3.6 mmol) gave N4-(3,5-dimethyl-4-methoxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-

pyrimidinediamine (180 mg, 35%). ^{1}H NMR (CD_3OD): δ 2.20 (s, 6H), 3.70 (s, 3H), 3.74 (s, 3H), 4.52 (s, 2H), 6.76 (ddd, J= 0.9, 2.4 and 8.4 Hz, 1H), 7.03-7.08 (m, 2H), 7.24 (m, 3H), 7.96 (d, J= 5.4 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ - 162.92; LCMS: ret. time: 23.13 min.; purity: 100%; MS (m/e): 427.04 (MH^+).

7.3.312 N4-[4-(N-Benzylpiperazino)phenyl]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945155)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-N2-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidineamine, the reaction of N4-[4-(N-benzylpiperazino)phenyl]-2-chloro-5-fluoro-4-pyrimidineamine (50 mg, 0.12 mmol) and 3,4-ethylenedioxyaniline (0.045 mL, 0.36 mmol) gave N4-[4-(N-benzylpiperazino)phenyl)]-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (40 mg, 63%). ^{1}H NMR ($CDCl_3$): δ 2.64 (t, J= 4.8 Hz, 4H), 3.20 (t, J= 4.8 Hz, 4H), 3.59 (s, 2H), 4.24 (m, 4H), 6.61 (d, 1H, NH), 6.68 (br, 1H, NH), 6.76 (d, J= 8.7 Hz, 1H), 6.88 (dd, J= 2.4 and 8.7 Hz, 1H), 6.93 (d, J= 8.7 Hz, 2H), 7.19 (d, J= 2.4 Hz, 1H), 7.28-7.36 (m, 5H), 7.47 (d, J= 8.7 Hz, 2H), 7.87 (d, J= 3.3 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ -168.66; LCMS: ret. time: 18.05 min.; purity: 100%; MS (m/e): 513.10 (MH^+).

7.3.313 N2-[(2,5-Dimethyl-3-furyl)methyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945162)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (50 mg, 0.21 mmol) and (2,5-dimethyl-3-furyl)methylamine (80 mg, 0.63 mmol) gave N2-[(2,5-dimethyl-3-furyl)methyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (40 mg, 59%). ^{1}H NMR (acetone-d_6): δ 2.14 (s, 6H), 4.37 (d, J= 4.2 Hz, 2H), 5.96 (s, 1H), 6.77 (d, J= 6.6 Hz, 1H), 7.23-7.28 (m, 2H), 7.44 (s, 1H), 8.11 (d, J= 4.8 Hz, 1H), 9.05 (br, 1H), 9.75 (br, 1H); ^{19}F NMR (282 MHz, acetone-d_6): δ - 165.77; LCMS: ret. time: 19.23 min.; purity: 94.89%; MS (m/e): 329.08 (MH^+).

7.3.314 N2-[4-(N-Benzylpiperazino)phenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945163)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylendioxyphenyl)-5-fluoro-4-pyrimidineamine (50 mg, 0.18 mmol) and 4-(4-benzylpiperazino)aniline (142 mg, 0.53 mmol) resulted N2-[4-(N-benzylpiperazino)phenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (30 mg, 33%). ^{1}H NMR ($CDCl_3$): δ 2.63 (t, J= 4.8 Hz, 4H), 3.16 (t, J= 4.8 Hz, 4H), 3.58 (s, 2H), 4.27 (m, 4H), 6.56 (d, 1H, NH), 6.70 (br, 1H, NH), 6.82 (d, J= 8.7 Hz, 1H), 6.89 (d, J= 9.0 Hz, 2H), 6.96 (dd, J= 2.7 and 8.7 Hz, 1H), 7.28 (d, J= 2.7 Hz, 1H), 7.30-7.36 (m, 5H), 7.39 (d, J= 8.7 Hz, 2H), 7.88 (d, J= 3.3 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 168.94; LCMS: ret. time: 18.12 min.; purity: 98.42%; MS (m/e): 512.95 (MH^+).

7.3.315 N2-(Benzothiophen-3-ylmethyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945164)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (50 mg, 0.21 mmol) and benzothiophen-3-ylmethylamine (100 mg, 0.61 mmol) gave N2-(benzothiophen-3-ylmethyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (40 mg, 53%). ^{1}H NMR ($CDCl_3$): δ 4.82 (d, J= 6.0 Hz, 2H), 6.45 (dd, J= 8.1 Hz, 1H), 6.70 (m, 1H), 6.80 (d, J= 8.4 Hz, 1H), 7.03 (t, J= 8.1 Hz, 1H), 7.22 (m, 1H), 7.34 (s, 1H), 7.39-7.46 (m, 2H), 7.82 (m, 1H), 7.89-7.92 (m, 2H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 170.02; LCMS: ret. time: 21.29 min.; purity: 92.97%; MS (m/e): 367.03 (MH^+).

7.3.316 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(3-pyridylmethyl)-2,4-pyrimidinediamine (R945165)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (50 mg, 0.21 mmol) and 3-pyridylmethylamine (68 mg, 0.63 mmol) gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-(3-pyridylmethyl)-2,4-pyrimidinediamine (40 mg, 62%). ^{1}H NMR ($CDCl_3$): δ 4.40 (d, J= 6.3 Hz, 2H), 5.60 (br, 1H), 6.62-6.70 (m, 3H), 7.05 (br, 1H), 7.14 (t, J= 8.1 Hz, 1H), 7.30 (dd, J= 5.1 and 7.8 Hz,

1H), 7.73 (d, J= 7.5 Hz, 1H), 7.80 (d, J= 3.3 Hz, 1H), 8.49 (d, J= 4.5 Hz, 1H), 8.66 (s, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 169.52; LCMS: ret. time: 9.41 min.; purity: 99.25%; MS (m/e): 312.01 (MH^+).

7.3.317 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(2-pyridylmethyl)-2,4-pyrimidinediamine (R945166)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (50 mg, 0.21 mmol) and 2-pyridylmethylamine (68 mg, 0.63 mmol) gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-(2-pyridylmethyl)-2,4-pyrimidinediamine (40 mg, 62%). ^{1}H NMR ($CDCl_3$): δ 4.73 (d, J= 6.3 Hz, 2H), 5.85 (t, J= 6.0 Hz, 1H, NH), 6.48 (d, J= 6.9 Hz, 1H), 6.61 (dd, J= 2.7 and 8.1 Hz, 1H), 6.67 (s, 1H), 7.13 (t, J= 8.1 Hz, 1H), 7.21 (dd, J= 5.1 and 7.5 Hz, 1H), 7.49 (d, J= 7.5 Hz, 1H), 7.69 (td, J= 1.8 and 7.8 Hz, 1H), 7.85 (d, J= 3.6 Hz, 1H), 8.38 (br, 1H), 8.56 (dd, J= 1.2 and 3.9 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ -170.49; LCMS: ret. time: 10.10 min.; purity: 100%; MS (m/e): 312.08 (MH^+).

7.3.318 N4-(3,5-Dimethoxyphenyl)-N2-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926802)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,5-dimethoxyphenyl)-5-fluoro-4-pyrimidineamine with 3-hydroxyaniline gave N4-(3,5-dimethoxyphenyl)-N2-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 18.98 min.; purity: 90%; MS (m/e): 357 (MH^+).

7.3.319 N4-(3,5-Dimethoxyphenyl)-N2-(2-ethoxycarbonylindol-7-yl)-5-fluoro-2,4-pyrimidinediamine (R926803)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,5-dimethoxyphenyl)-5-fluoro-4-pyrimidineamine with 2-ethoxycarbonyl-7-aminoindole gave N4-(3,5-dimethoxyphenyl)-N2-(2-ethoxycarbonylindol-7-yl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 24.21 min.; purity: 91%; MS (m/e): 452 (MH^+).

7.3.320 N2-(3,4-Dimethoxyphenyl)-N4-(4-ethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926108)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(4-ethoxyphenyl)-5-fluoro-4-pyrimidineamine with 3,4-dimethoxyaniline gave N2-(3,4-dimethoxyphenyl)-N4-(4-ethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.89 (d, 1H, J= 3 Hz), 7.45 (bd, 2H, J= 9 Hz), 7.20 (d, 1H, J= 2.4 Hz), 6.96-6.77 (m, 5H), 6.63 (bs, 1H), 4.03 (q, 2H, J= 7.2 Hz), 3.86 (s, 3H), 3.72 (s, 3H), 1.42 (t, 3H, J= 7.2 Hz); ^{19}F NMR (CDCl3): -47473.

7.3.321 N4-(4-Ethoxyphenyl)-N2-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926146)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(4-ethoxyphenyl)-5-fluoro-4-pyrimidineamine with 3-hydroxyaniline gave N4-(4-ethoxyphenyl)-N2-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.79 (d, 1H, J= 4.2 Hz), 7.54 (dd, 2H, J= 2.4 and 7.2 Hz), 7.05-6.97 (m, 3H), 6.87 (dd, 2H, J= 2.4 and 4.2 Hz), 6.41 (m, 1H), 4.02 (q, 2H, J= 6.6 Hz), 1.38 (t, 3H, J= 6.9 Hz); ^{19}F NMR (CD_3OD): - 47444; LCMS: ret. time: 21.15 min.; purity: 98%; MS (m/e): 341 (MH^+).

7.3.322 N4-(4-Ethoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926213)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(4-ethoxyphenyl)-5-fluoro-4-pyrimidineamine with 3,4-ethylenedioxyaniline gave N4-(4-ethoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.87 (d, 1H, J= 3Hz), 7.47 (dd, 2H, J= 2.4 and 5.1 Hz), 7.18 (d, 1H, J= 2.4 Hz), 6.91-6.85 (m, 3H), 6.79-6.73 (m, 2H), 6.64 (bs, 1H), 4.25 (bs, 4H), 4.05 (q, 2H, J= 6.9 Hz), 1.43 (t, 3H, J= 7.2 Hz); ^{19}F NMR ($CDCl_3$): - 47467; LCMS: ret. time: 24.32 min.; purity: 90%; MS (m/e): 383 (MH^+).

7.3.323 N4-(3,4-Dimethoxyphenyl)-N2-(4-ethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926145)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-

dimethoxyphenyl)-5-fluoro-4-pyrimidineamine with 4-ethoxyaniline gave N4-(3,4-dimethoxyphenyl)-N2-(4-ethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.90 (bs, 1H), 7.37 (dd, 2H, J= 2.4 and 6.3 Hz), 7.21 (d, 1H, J= 2.4 Hz), 7.03 (dd, 1H, J= 2.4 and 8.1 Hz), 6.86-6.80 (m, 4H), 6.65 (bs, 1H), 4.00 (q, 2H, J= 7.2 Hz), 3.89 (s, 3H), 3.75 (s, 3H), 1.39 (t, 3H, J= 6.9 Hz); ^{19}F NMR ($CDCl_3$): -47501; LCMS: ret. time: 22.69 min.; purity: 98%; MS (m/e): 385 (MH^+).

7.3.324 N4-(3,4-Dimethoxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926147)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-dimethoxyphenyl)-5-fluoro-4-pyrimidineamine with 3-hydroxyaniline gave N4-(3,4-dimethoxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.77 (d, 1H, J= 3.3 Hz), 7.15 (d, 1H, J= 2.4 Hz), 7.05 (dd, 1H, J= 2.4 and 8.4 Hz), 7.00-6.90 (m, 4H), 6.80 (d, 1H, J= 8.1 Hz), 6.40 (m, 1H), 4.05 (q, 2H), 3.80 (s, 3H), 3.75 (s, 3H), 1.20 (t, 3H); ^{19}F NMR (CD_3OD): - 47223; LCMS: ret. time: 17.94 min.; purity: 99%; MS (m/e): 357 (MH^+).

7.3.325 N2-(3,4-Dimethoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926113)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 3,4-dimethoxyaniline gave N2-(3,4-dimethoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.90 (d, 1H, J= 6.6 Hz), 7.59 (bs, 1H), 7.30 (s, 1H), 7.20-7.10 (m, 2H), 7.00-6.75 (m, 4H), 6.59 (bd, 1H, J= 7.8 Hz), 3.87 (s, 3H), 3.84 (s, 3H); ^{19}F NMR ($CDCl_3$): - 47229; LCMS: ret. time: 17.77 min.; purity: 78%; MS (m/e): 357 (MH^+).

7.3.326 N2-(4-Ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926395)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with ethyl-4-aminophenoxyacetate gave N2-(4-ethoxyearbonylmethyleneoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.90 (d, 1H, J= 5.1 Hz), 7.35 (dd, 2H, J= 2.1 and

7.2 Hz), 7.13 (t, 1H, J= 7.2 Hz), 7.10 9d, 1H, J= 6.6 Hz), 6.96 (dd, 2H, J= 2.4 and 7.2 Hz), 6.67 (m, 1H), 4.72 (s, 2H), 4.25 (q, 2H, J= 7.2 Hz), 1.29 (t, 3H, J= 7.2 Hz); ^{19}F NMR (CD_3OD): - 21885; LCMS: ret. time: 20.18 min.; purity: 92%; MS (m/e): 399 (MH^+).

7.3.327 5-Bromo-N2-(4-ethoxycarbonylmethyleneoxyphenyl)-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926396)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with ethyl 4-aminophenoxyacetate gave 5-bromo-N2-(4-ethoxycarbonylmethyleneoxyphenyl)-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 21.64 min.; purity: 92%; MS (m/e): 459 (MH^+).

7.3.328 N2-(4-Ethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926211)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-ethoxyaniline were reacted to yield N2-(4-ethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.88 (bs, 1H), 7.40 (bd, 2H, J= 8.7 Hz), 7.27 (bd, 2H, J= 6.3 Hz), 6.95 (dd, 1H, J= 3 and 9 Hz), 6.86-6.77 (m, 3H), 6.58 (s, 1H), 4.28 (bs, 4H), 4.01 (q, 2H, J= 6.9 Hz), 1.40 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 24.46 min.; purity: 90%; MS (m/e): 383 (MH^+).

7.3.329 N2-(3,4-Dimethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926212)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3,4-dimethoxyaniline were reacted to yield N2-(3,4-dimethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.98 min.; purity: 74%; MS (m/e): 399 (MH^+).

7.3.330 N2-(3-Chloro-4-fluorophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926218)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3-chloro-4-fluoroaniline were reacted to yield N2-(3-chloro-4-fluorophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR

(CD_3OD): δ 7.75 (bd, 1H), 7.70 (bd, 1H), 7.18 (m, 1H), 7.10 (m, 1H), 6.90 (m, 2H), 6.75 (m, 1H), 4.20 (bs, 4H); LCMS: ret. time: 25.04 min.; purity: 99%; MS (m/e): 392 (MH^+).

7.3.331 N2-(4-tert-Butylphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926219)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-tert-butylaniline were reacted to yield N2-(4-tert-butylphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.85 (d, 1H, J= 3.6 Hz), 7.44 (bdd, 2H, J= 6.3 Hz), 7.35-7.31 (m, 3H), 6.93 (dd, 1H, J= 2.7 and 8.7 Hz), 6.83 (d, 1H, J= 9 Hz), 6.80 (bs, 1H), 4.23 (s, 4H), 1.28 (s, 9H); LCMS: ret. time: 27.67 min.; purity: 98%; MS (m/e): 395 (MH^+).

7.3.332 N4-(3,4-Ethylenedioxyphenyl)-N2-(4-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine (R926220)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-fluoroaniline were reacted to yield N4-(3,4-ethylenedioxyphenyl)-N2-(4-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.92 (bs, 1H), 7.80 (bs, 1H), 7.60 (bd, 2H), 6.90 (m, 2H), 6.80 (bs, 1H), 6.65 (bs, 1H), 4.25 (s, 4H); LCMS: ret. time: 22.87 min.; purity: 97%; MS (m/e): 357 (MH^+).

7.3.333 N4-(3,4-Ethylenedioxyphenyl)-N2-(3-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine (R926221)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3-fluoroaniline were reacted to yield N4-(3,4-ethylenedioxyphenyl)-N2-(3-fluorophenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.76 (d, 1H, J= 5.6 Hz), 7.39 (m, 2H), 7.14 (d, 1H, J= 2.4 Hz), 6.94-6.85 (m, 3H), 6.75 (d, 1H, J= 9 Hz), 4.21 (s, 4H); LCMS: ret. time: 22.60 min.; purity: 100%; MS (m/e): 357 (MH^+).

7.3.334 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(2-methoxyethyl)-2,4-pyrimidinediamine (R926229)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-

4-pyrimidineamine and 2-methoxyethylamine were reacted to yield N4-(3,4-ethylenedioxyphenyl)--5-fluoro -N2-(2-methoxyethyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.81 (bs, 1H), 7.33 (d, 1H, J= 2.4 Hz), 6.93 (dd, 1H, J= 2.4 Hz and 9 Hz), 6.81 (d, 1H, J= 9 Hz), 6.53 (s, 1H), 4.25 (bs, 2H), 3.54 (bs, 2H), 3.36 (s, 3H); LCMS: ret. time: 18.01 min.; purity: 100%; MS (m/e): 321 (MH^+).

7.3.335 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(4-methoxybenzyl)-2,4-pyrimidinediamine (R926230)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-methoxybenzylamine were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(4-methoxybenzyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.81 (d, 1H, J= 2.7 Hz), 7.27 (m, 3H), 6.86 (m, 3H), 6.52 (s, 1H). 5.14 (s, 1H), 4.46 (d, 2H, J= 5.4 Hz), 4.24 (s, 4H), 3.78 (s, 3H); LCMS: ret. time: 23.06 min.; purity: 94%; MS (m/e): 383 (MH^+).

7.3.336 N2-(2,2-Difluorobenzodioxol-5-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926386)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2,2-difluoro-5-aminobenzodioxole were reacted to yield N2-(2,2-difluorobenzodioxol-5-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 9.39 (s, 1H), 9.24 (s, 1H), 8.06 (d, 1H, J= 5.6 Hz), 7.87 (d, 1H, J= 1.8 Hz), 7.27-7.19 (m, 3H), 7.08 (dd, 1H, J= 2.4 and 8.7 Hz), 6.80 (d, 1H, J= 9Hz), 4.21 (bs, 4H); ^{19}F NMR ($CDCl_3$): -14012 and - 46487; LCMS: ret. time: 25.32 min,; purity:100%; MS (m/e): 419 (MH^+).

7.3.337 N2-(2-Ethoxycarbonylindol-5-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926476)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 2-ethoxycarbonyl-5-aminoindole were reacted to yield N2-(2-ethoxycarbonylindol-5-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine.

^{1}H NMR ($CDCl_3$): δ 7.84 (d, 1H, J= 5.4 Hz), 7.76 (d, 1H, J= 3.6 Hz), 7.50 (d, 1H, J= 9 Hz), 7.23-7.15 (m, 3H), 7.03 (bd, 1H, J= 8.7 Hz), 6.78 (d, 1H, J= 8.7 Hz), 4.38 (q, 2H, J= 7.2 Hz), 4.22 (s, 4H), 1.41 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 23.58 min; purity: 100%; MS (m/e): 451 (MH^+).

7.3.338 N2-(4-Cyanomethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926480)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-cyanomethyleneoxyaniline were reacted to yield N2-(4-cyanomethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.87 (d, 1H, J= 3.6 Hz), 7.52 (d, 1H, J= 8.7 Hz), 7.38 (bs, 1H), 7.28 (d, 1H, J= 2.4 Hz), 6.96-6.86 (m, 3H), 6.65 (bd, 1H), 4.73 (s, 2H), 4.29 (m, 4H); ^{19}F NMR ($CDCl_3$): - 47416; LCMS: ret. time: 20.49 min.; purity: 100%; MS (m/e): 394 (MH^+).

7.3.339 N2-(3-Ethoxycarbonylmethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926482)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and ethyl-3-aminophenoxyacetate were reacted to yield N2-(3-ethoxycarbonylmethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 10.53 (s, 1H), 8.18 (s, 1H), 7.67 (d, 1H, J= 4.8 Hz), 7.19-7.02 (m, 5H), 6.86 (d, 1H, 9Hz), 6.71 (dd, 1H, J= 1.8 and 9 Hz), 4.51 (s, 2H), 4.25 (m, 6H), 1.29 (t, 3H, J= 7.5 Hz); ^{19}F NMR ($CDCl_3$): - 45640; LCMS: ret. time: 22.71 min.; purity: 99%; MS (m/e): 441 (MH^+).

7.3.340 N2-(3-Ethoxycarbonylphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R925745)

In like manner to preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 3-ethoxycarbonylaniline gave N2-(3-ethoxycarbonylphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.04 (bs, 1H), 7.94 (bs, 1H), 7.90 (bd, 1H), 7.68 (bd, 1H, J= 7.5 Hz), 7.35 (t, 1H, J= 8.1 Hz), 7.28 (d,

1H, J= 2.4 Hz), 7.07 (s, 1H), 6.93 (dd, 1H, J= 3 and 8.7 Hz), 6.83 (d, 1H, J= 9 Hz), 6.64 (bs, 1H), 4.36 (q, 2H, J= 7.2 Hz), 4.26 9s, 4H), 1.35 (t, 3H, J= 7.5 Hz); ^{19}F NMR ($CDCl_3$): - 47247; LCMS: ret. time: 15.88.; purity: 100%; MS (m/e): 411 (MH^+).

7.3.341 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(2-hydroxyethyl)-2,4-pyrimidinediamine (R925746)

In like manner to preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamineand 2-hydroxyethylamine gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(2-hydroxyethyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.7 (bs, 1H), 7.32 (d, 1H, J= 2.4 Hz), 7.05 (dd, 1H, J= 2.4 and 9 Hz), 6.75 (d, 1H, J= 8.9 Hz), 4.21 (s, 4H), 3.67 (t, 2H, J= 5.7 Hz), 3.38 (t, 2H, J= 5.4 Hz); ^{19}F NMR (CD_3OD): - 48518; LCMD: ret. time: 15.54 min.; purity: 100%; MS (m/e): 307 (MH^+).

7.3.342 N2-(4-Ethoxycarbonylmethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R925747)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamineand ethyl-4-aminophenoxyacetate gave N2-(4-ethoxycarbonylmethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.88 (bs, 1H), 7.42 (dd, 2H, J= 2.4 and 6.9 Hz), 7.28 (d, 1H, J= 3 Hz), 6.95-6.81 (m, 4H), 6.59 (s, 1H), 4.59 (s, 4H), 4.28 (q, 2H, J= 6.2 Hz), 1.30 (t, 3H, J= 6.1 Hz); 19F NMR (CDCl3): - 47570; LCMS: ret. time: 22.74 min.; purity: 100%; MS (m/e): 441 (MH^+).

7.3.343 N2-(3-Chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R940233)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 3-chloro-4-hydroxy-5-methylaniline gave N2-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: retn, time: 19.20 min.; purity: 94%; MS (m/e): 360 (M^+); ^{1}H NMR ($CDCl_3$): δ 7.93 (1H, d, J= 3.1 Hz), 7.54 (1H, d, J= 2.6 Hz), 7.30 (1H, t, J= 2.1 Hz), 7.21 (1H, t, J= 7.9 Hz), 7.02 (3H, m), 6.78 (1H, s), 6.61 (1H, dd, J= 7.9 Hz, J= 2.1 Hz), 2.26 (3H, s).

7.3.344 N4-(3-Chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R940235)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-chloro-4-hydroxy-5-methylphenyl)-4-pyrimidineamine with 3-hydroxyaniline gave N4-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: retn, time: 18.20 min.; purity: 94%; MS (m/e): 360 (M^+); 1□□□□ (DMSO-d6): δ 9.26 (1H, s), 9.23 (1H, s), 9.16 (1H, s), 8.89 (1H, s), 8.14 (1H, d, J= 4.5 Hz), 7.66 (1H, d, J= 2.1 Hz), 7.60 (1H, d, J= 2.1 Hz), 7.29 (1H, d, J= 8.4 Hz), 7.11 (1H, s), 7.06 (1H, t, J= 8.4 Hz), 6.41 (1H, d, J= 8.4 Hz), 2.30 (3H, s).

7.3.345 N2-(3,4-Dimethoxyphenyl)-5-fluoro-N4-[4-[3-(N-morpholinyl)propyl]oxyphenyl]-2,4-pyrimidinediamine (R940250)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-[4-[3-(N-morpholinyl)propyl]oxyphenyl]-4-pyrimidineamine with 3,4-dimethoxyaniline gave N2-(3,4-dimethoxyphenyl)-5-fluoro-N4-[4-[3-(N-morpholinyl)propyl]oxyphenyl]-2,4-pyrimidinediamine. LCMS: retn, time: 14.72 min.; purity: 94%; MS (m/e): 484 (MH^+); ^1H NMR ($CDCl_3$): δ 7.89 (1H, d, J= 3.3 Hz), 7.47 (2H, d, J= 9 Hz), 7.22 (1H, d, J= 2.2 Hz), 6.93-6.76 (5H, m), 6.64 (1H, d, J= 2.2 Hz), 4.01 (2H, t, J= 5.6 Hz), 3.86 (3H, s), 3.72 (3H, s), 3.71 (4H, m), 2.58-2.44 (6H, m), 1.97 (2H, m).

7.3.346 N2-(3-Chloro-4-hydroxy-5-methylphenyl)-5-fluoro- N4-[4-[3-(N-morpholinyl)propyl]oxyphenyl]-2,4-pyrimidinediamine (R940251)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-[4-[3-(N-morpholinyl)propyl]oxyphenyl]-4-pyrimidineamine with 2-chloro-4-hydroxy-5-methylaniline gave N2-(2-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N4-[4-[3-(N-morpholinyl)propyl]oxyphenyl]-2,4-pyrimidinediamine. LCMS: retn, time: 15.19 min.; purity: 94%; MS (m/e): 488 (MH^+); ^1H NMR ($CDCl_3$): δ 7.89 (1H, d, J= 3.3 Hz), 7.52 (1H, d, J= 2.5 Hz), 7.44 (2H, d, 8.7 Hz), 6.97 (1H, d, J= 2.5 Hz), 6.91 (2H, d, 9 Hz), 6.71 (1H, s), 6.64 (1H, 2.5 Hz), 4.03 (2H, t, J= 6.03 Hz), 3.74 (4H, t, J= 4.65 Hz), 2.60-2.43 (6H, m), 2.23 (3H, s), 1.49 (2H, m).

7.3.347 N4-(3,5-Dimethyl-4-hydroxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940253)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,5-dimethyl-4-hydroxyphenyl)-5-fluoro-4-pyrimidineamine with ethyl 3-aminophenoxyacetate gave N4-(3,5-dimethyl-4-hydroxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: retn, time: 21.79 min.; purity: 91 %; MS (m/e): 427 (MH^+); 1H NMR (DMSO-d6): δ 9.80 (1H, s), 8.30 (1H, s), 8.23 (1H, d, J= 4.5 Hz), 7.37-7.17 (5H, m), 6.66 (1H, d, J= 9 Hz), 4.73 (2H, s), 4.25 (2H, q, J= 7.2 Hz), 2.23 (6H, s), 1.29 (3H, t, J= 7.0 Hz).

7.3.348 N2-(3-*tert*-Butylphenyl)-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-4-pyrimidinediamine (R940266)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-4-pyrimidineamine with 3-*tert*-butylaniline gave N2-(3-*tert*-butylphenyl)-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-4-pyrimidinediamine. LCMS: retn, time: 28.17 min.; purity: 96 %; MS (m/e): 439 (M^+), 440 (MH^+); ^{1}H NMR (DMSO-d6): δ 9.40 (1H, s), 9.19 (1H, s), 8.21 (1H, d, J= 3.6 Hz), 7.78 (1H, d, J= 8.5 Hz) 7.60 (2H, m), 7.48 (1H, t, J= 2 Hz), 7.31 (1H, t, J= 8.5 Hz), 7.25 (1H, t, J= 8.5 Hz), 7.02 (1H, d, J= 8.5 Hz), 6.70 (1H, dd, J= 8.5 and 2 Hz), 4.79 (2H, s), 4.26 (2H, q, J= 7.2 Hz), 1.33 (9H, s), 1.29 (3H, t, J= 7.2 Hz).

7.3.349 5-Fluoro-N4-(3-isopropylphenyl)-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine and 5-fluoro-N2-(2-ethoxoxycarbonylbenzofur-5-yl)-N4 -(3-isopropylphenyl)-2,4-pyrimidinediamine R940284

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hyroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-isopropylphenyl)-4-pyrimidineamine and ethyl 3-aminophenoxyacetate were reacted to give the mixture of 5-fluoro-N4-(3-isopropylphenyl)-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine and 5-fluoro-N2-(2-ethoxoxycarbonylbenzofur-5-yl)-N4 -(3-isopropylphenyl)-2,4-pyrimidinediamine. (R = CO_2Me). LCMS: retn, time: 25.41 min.; purity: 60.61 %; MS (m/e): 411 (MH^+); 1H NMR (DMSO-d6): δ 9.38 (1H, s), 9.29 (1H, s),

8.20 (1H, d, J= 3.9 Hz), 7.85 (1H, d, J= 9.3 Hz), 7.58 (1H, t, J= 1.6 Hz), 7.43-7.33 (3H, m), 7.18 (1H, t, J= 8.2 Hz), 7.05 (1H, d, J= 7.8 Hz), 6.53 (1H, dd, J= 8.4 Hz, J= 2.1 Hz), 4.72 (2H, s), 3.79 (3H, s), 2.95 (1H, quint, J= 7.2 Hz), 1.26 (6H, d, J= 7.2 Hz) (R = CO_2Et) LCMS: retn, time: 26.99 min.; purity: 39 %; MS (m/e): 425 (MH^+); 1H NMR (DMSO-d6): δ 9.38 (1H, s), 9.29 (1H, s), 8.20 (1H, d, J= 3.9 Hz), 7.85 (1H, d, J= 9.3 Hz), 7.58 (1H, t, J= 1.6 Hz), 7.43-7.33 (3H, m), 7.18 (1H, t, J= 8.2 Hz), 7.05 (1H, d, J= 7.8 Hz), 6.53 (1H, dd, J= 8.4 and 2.1 Hz), 4.71 (2H, s), 4.25 (2H, q, J= 7.2 Hz), 2.95 (1H, quint, J= 7.2 Hz), 1.31 (3H, t, J= 7.2 Hz), 1.26 (6H, d, J= 7.2 Hz).

7.3.350 N4-(3-*tert*-Butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine R940281

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hyroxyphenyl)-2,4-pyrimidinediamine, N4-(3-*tert*-butylphenyl)-2-chloro-5-fluoro-4-pyrimidineamine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to give N4-(3-*tert*-butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine. LCMS: retn, time: 26.76 min.; purity: 97 %; MS (m/e): 435 (MH^+); 1H NMR (DMSO-d6): δ 9.41 (2H, sl), 8.27 (1H, s), 8.21 (1H, d, J 3.9 Hz), 7.98 (1H, m), 7.77-7.60 (3H, m), 7.37 (1H, t, J 8.1 Hz), 7.22 (1H, d, J 8.1 Hz), 3.98 (3H, s), 1.34 (9H, s).

7.3.351 5-fluoro-N4-(3-isopropylphenyl)-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine R940283

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hyroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-isopropylphenyl)-4-pyrimidineamine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to give 5-fluoro-N4-(3-isopropylphenyl)-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine. LCMS: retn, time: 26.05 min.; purity: 99 %; MS (m/e): 420 (M^+), 422 (MH^+); ^1H NMR (DMSO-d6): δ 10.00 (1H, s), 9.95 (1H, s), 8.31 (1H, d, J= 4.8 Hz), 8.11 (1H, s), 7.74 (3H, m), 7.35 (1H, s), 7.35 (1H, t, J= 7.2 Hz), 7.12 (1H, d, J= 7.2 Hz), 3.99 (3H, s), 2.83 (1H, sept, J= 6.9 Hz), 1.20 (6H, d, J= 6.9 Hz).

7.3.352 N2-(1,1-Dihydroisobenzofuran-1-one-6-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926786)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 6-amino-1,1-dihydroisobenzofuran-1-one gave N2-(1,1-dihydroisobenzofuran-1-one-6-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.20 (s, 1H), 9.85 (s, 1H), 8.22 (d, 1H, J= 4.8 Hz), 8.10 (d, 1H, J= 1.2 Hz), 7.86 (dd, 1H, J= 2.4 and 8.7 Hz), 7.54 (d, 1H, J= 8.4 Hz), 7.22 (d, 1H, J= 2.4 Hz), 7.13 (dd, 1H, J= 2.1 and 9 Hz), 6.81 (d, 1H, J= 8.7 Hz), 5.34 (s, 2H), 4.20 (s, 4H); LCMS: ret. time: 17.40 min.; purity: 83%; MS (m/e): 395 (MH^+).

7.3.353 N2-[3-(3-Acetamidophenoxy)propyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926787)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 3-N-acetamidophenoxy-3-propylamine gave N2-[3-(3-acetamidophenoxy)propyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.45 (bs, 1H), 10.07 (s, 1H), 8.42 (s, 1H), 8.20 (s, 1H), 7.37 (d, 1H, J= 3 Hz), 7.31 (s, 1H), 7.20-7.05 (m, 3H), 6.83 (d, 1H, J= 9Hz), 6.53 (d, 1H, J= 6.6 Hz), 4.18 (s, 4H), 3.95 (t, 2H, J= 6 Hz), 2.48 (m, 2H), 2.07 (s, 3H), 1.96 (t, 3H, J= 7.8 Hz); LCMS: ret. time: 19.58 min.; purity: 99%; MS (m/e): 454 (MH^+).

7.3.354 N2-[4-(4,5-Dichloro-1H-imidazol-1-yl)phenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926788)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 4,5-dichloro-1H-imidazoleamine gave N2-[4-(4,5-dichloro-1H-imidazol-1-yl)phenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.10 (s, 1H), 9.85 (s, 1H), 8.20 (d, 1H, J= 4.2 Hz), 8.01 (s, 1H), 7.78 (d, 1H, J= 8.7 Hz), 7.36 (d, 1H, J= 9 Hz), 7.25 (d, 1H, J= 3 Hz), 7.14 (dd, 1H, J= 2.1 and 9 Hz), 6.85 (d, 1H, J= 8.7 Hz); LCMS: ret. time: 23.59 min.; purity: 95%; MS (m/e): 474 (MH^+).

7.3.355 N2-(2,4-Dimethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926789)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 2,4-dimethoxyaniline gave N2-(2,4-dimethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.35 (s, 1H), 8.14 (bd, 1H), 7.38 (d, 1H, J= 9 Hz), 7.23 (s, 1H), 7.09 (d, 1H, J= 8.7 Hz), 6.79 (d, 1H, J= 8.7 Hz), 6.66 (d, 1H, J= 2.4 Hz), 6.49 (dd, 1H, J= 2.4 and 9 Hz), 4.22 (s, 4H), 3.77 (s, 6H); LCMS: ret. time: 20.93 min.; purity: 98%; MS (m/e): 399 (MH^+).

7.3.356 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(4-isopropylphenyl)-2,4-pyrimidinediamine (R926790)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 4-isopropylaniline gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(4-isopropylphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.30 (s, 1H), 10.50 (s, 1H), 8.22 (d, 1H, J= 5.4 Hz). 7.37 (d, 1H, J= 8.4 Hz), 7.26 (d, 1H, J= 3 Hz), 7.18 (s, 1H), 7.15 (s, 1H), 7.06 (dd, 1H, J= 3.3 and 8.7 Hz), 6.81 (d, 1H, J= 8.7 Hz), 4.23 (s, 4H), 2.85 (sept., 1H, J= 7.2 Hz), 1.17 (d, 6H, J= 6.9 Hz); LCMS: ret. time: 24.91 min.; purity: 95%; MS (m/e): 381 (MH^+).

7.3.357 N2-(3,5-Dimethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926791)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 3,4-dimethoxyaniline gave N2-(3,5-dimethoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.08 (s, 1H), 9.99 (s, 1H), 8.19 (m, 1H), 7.21 (d, 1H, J= 2.4 Hz), 7.14 (dd, 1H, J= 2.1 and 8.7 Hz), 6.79 (d, 1H, J= 9 Hz), 6.72 (s, 1H), 6.20 (d, 1H, J= 1.8 Hz), 4.21 (s, 4H); LCMS: ret. time: 21.19 min.; purity: 93%; MS (m/e): 399 (MH^+).

7.3.358 N2-(2,5-Dimethyl-4-hydroxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926792)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 2,5-dimethyl-4-hydroxyaniline gave N2-(2,5-dimethyl-4-hydroxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.69 (d, 1H, J= 3.9 Hz), 7.16 (d, 1H, J= 2.4 Hz), 7.05 (d, 1H, J= 2.4 Hz), 7.02 (d, 1H, J= 1.2 Hz), 6.66 (s, 1H), 6.63 (s, 1H), 6.62 (s, 1H), 4.19 (s, 4H), 2.12 (s, 3H), 2.10 (s, 3H); LCMS: ret. time: 19.80 min.; purity: 90%; MS (m/e): 383 (MH^+).

7.3.359 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(5-methyl-3-phenyl-4-oxazolyl)-2,4-pyrimidinediamine (R926793)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 5-methyl-3-phenyl-4-oxazolylamine gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(5-methyl-3-phenyl-4-oxazolyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.80-7.65 (m, 2H), 7.45 (bd, 1H), 7.20 (m, 1H), 7.00 (m, 1H), 6.65 (bd, 1H), 4.20 (s, 4H), 2.35 (s, 3H); LCMS: ret. time: 20.61 min.; purity: 78%; MS (m/e): 420 (MH^+).

7.3.360 N4-(3,5-Dimethoxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926795)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,5-dimethoxyphenyl)-5-fluoro-4-pyrimidineamine with ethyl-3-aminophenoxyacetate gave N4-(3,5-dimethoxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 21.02 min.; purity: 84%; MS (m/e): 429 (MH^+).

7.3.361 N4-(3,4-Ethylenedioxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926797)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-

dimethoxyphenyl)-5-ethoxycarbonyl-4-pyrimidineamine with ethyl-3-aminophenoxyacetate gave N4-(3,4-ethylenedioxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine. LCMS: ret. time: 27.60 min.; purity: 82%; MS (m/e): 495 (MH^+).

7.3.362 N4-(3-Hydroxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926798)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro- -5-ethoxycarbonyl-N4-(3-hydroxyphenyl)-4-pyrimidineamine with ethyl-3-aminophenoxyacetate gave N4-(3-hydroxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine. LCMS: ret. time: 24.78 min.; purity: 85%; MS (m/e): 453 (MH^+).

7.3.363 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine (R926614)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 2-methoxycarbonyl-5-aminobenzofuran gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine. ^1H NMR (CD_3OD): δ 9.42 (s, 1H), 9.33 (s, 1H), 9.23 (s, 1H), 8.26 (s, 1H), 8.09 (d, 1H, J= 3.6 Hz), 7.59 (m, 3H), 7.13 (m, 3H), 6.53 (d, 1H, J= 7.5 Hz), 3.87 (s, 3H), 3.87 (s, 3H).

7.3.364 N2-(2-Ethoxycarbonylindol-5-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926615)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 2-ethoxycarbony-5-aminoindole gave N2-(2-ethoxycarbonylindol-5-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR (CD_3OD): δ 7.95 (d, 1H), 7.84 (d, 1H, J= 3.9 Hz), 7.34 (s, 1H), 7.33 (d, 1H, J= 1.8 Hz), 7.22-7.19 (m, 2H), 7.11-7.05 (m, 2H), 6.55 (m, 1H), 4.62 (s, 2H), 4.38 (q, 1H, J= 6.9 Hz), 1.40 9t, 3H, J= 7.5 Hz).

7.3.365 N2-[4-(4,5-Dichloro-1H-imidazol-1-yl)phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926777)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with (4,5-dichloro-1H-imidazol-1-yl)-4-aniline gave N2-[4-(4,5-dichloro-1H-imidazol-1-yl)phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 22.09 min.; purity: 98%; MS (m/e): 431 (MH^+).

7.3.366 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(4-isopropylphenyl)-2,4-pyrimidinediamine (R926778)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 4-isopropylaniline gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-(4-isopropylphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 23.08 min.; purity: 99%; MS (m/e): 439 (MH^+).

7.3.367 5-Fluoro N4-(3-hydroxyphenyl)-N2-(5-methyl-4-oxazolyl-2-phenyl)-2,4-pyrimidinediamine (R926779)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 5-methyl-4-oxazolyl-2-phenyl-1-amine gave 5-fluoro N4-(3-hydroxyphenyl)-N2-(5-methyl-4-oxazolylphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 23.08 min.; purity: 99%; MS (m/e): 439 (MH^+). LCMS: ret. time: 19.17 min.; purity: 81%; MS (m/e): 378 (MH^+).

7.3.368 N2-(3.5-Dimethoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926780)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 3.5-dimethoxyaniline gave N2-(3.5-dimethoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 19.61 min.; purity: 97%; MS (m/e): 357 (MH^+).

7.3.369 N4-(4-tert-Butoxycarbonylmethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl-2,4-pyrimidinediamine (R926572)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N4-(4-tert-butoxycarbonylmethyleneoxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine with methyl 4-aminophenoxyacetate gave N4-(4-tert-butoxycarbonylmethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.49 (d, 2H, J= 8.7 Hz), 7.40 (d, 2H, J= 9.3 Hz), 6.89 (d, 2H, J= 9.3 Hz), 6.85 (d, 2H, J= 8.7 Hz), 4.62 (s, 2H), 4.52 (s, 2H), 3.81 (s, 3H), 1.49 (s, 9H); LCMS: ret. time: 24.68 min.; purity: 100%; MS (m/e): 499 (MH^+).

7.3.370 5-Fluoro-N4-(3-isopropoxyphenyl)-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine (R926487)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-isopropoxyphenyl)-4-pyrimidinediamineamine with 2-methoxycarbonyl-5-aminobenzofuran gave 5-fluoro-N4-(3-isopropoxyphenyl)-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.09 (d, 1H, J= 2.4 Hz), 7.96 (d, 1H, J= 3 Hz), 7.52 (s, 1H), 7.48 (t, 1H, J= 1.8 Hz), 7.40 (dd, 1H, J= 6.3 Hz), 7.24 9m, 2H), 7.10 (m, 1H), 6.97 (bs, 1H), 6.74 (d, 1H, J= 2.4 Hz), 6.68 (dd, 1H, J= 2.1 and 6.9 Hz), 4.49 (sept., 1H, J= 5.7 Hz), 3.98 (s, 3H), 1.30 (d, 6H, J= 5.7 Hz); LCMS: ret. time: 25.86 min.; purity: 94%; MS (m/e): 437 (MH^+).

7.3.371 N4-(4-tert-Butylphenyl)-N2-(2-ethoxycarbonylindol-5-yl)-5-fluoro-2,4-pyrimidinediamine (R926474)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N4-(tert-butylcarbonylmethyleneoxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine with 2-ethoxycarbony-5-aminolindole gave N4-(4-tert-butylphenyl)-N2-(2-ethoxycarbonylindol-5-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.05 (d, 1H, J= 1.8 Hz), 7.85 (d, 1H, J= 3.9 Hz), 7.58 (d, 2H, J= 9 Hz), 7.36-7.10 (m, 4H), 7.03 (s, 1H), 6.95 (bd, 1H), 6.84 (dd, 1H, J= 7.2 Hz), 4.36 (q, 2H, J= 7.2 Hz), 1.40 (t, 3H, J= 7.5 Hz), 1.33 (s, 9H); LCMS: ret. time: 28.67 min.; purity: 100%; MS (m/e): 449 (MH^+).

7.3.372 N4-(4-tert-Butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine (R926477)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N4-(tert-butylcarbonylmethyleneoxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine with 2-methoxycarbonyl-5-aminobenzofuran gave N4-(4-tert-butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.6 (s, 1H), 8.09)d, 1H, J= 1.8 Hz), 7.86 (d, 1H, J= 3.3 Hz), 7.54-7.36 (m, 6H), 6.90 (m, 1H)3.97 (s, 3H), 1.36 (s, 9H), ^{19}F NMR ($CDCl_3$): - 47188; LCMS: ret. time: 29.69 min.; purity: 84%; MS (m/e): 393 (M-41).

7.3.373 N2-(3,4-Ethylenedioxyphenyl)-N4-(2-methoxycarbonylbenzofuran-5-yl)-5-fluoro-2,4-pyrimidinediamine (R926485)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidineamine with 2-methoxycarbonyl-5-aminobenzofuran gave N2-(3,4-ethylenedioxyphenyl)-N4-(2-methoxycarbonylbenzofuran-5-yl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.07 (s, 1H), 7.76 (s, 1H), 7.44 (m, 3H), 7.13 (m, 1H), 6.68 (m, 2H0, 4.18 (s, 4H), 3.95 (s, 3H); LCMS: ret. time: 26.63 min.; purity:100%; MS (m/e): 437 (MH^+).

7.3.374 N4-(3-Ethoxycarbonylmethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926774)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidineamine with 3,4-ethylenedioxyaniline gave N4-(3-ethoxycarbonylmethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.92 (d, 1H, J= 3.6 Hz), 7.67 (s, 1H), 7.40 (s, 1H), 7.28-7.21 (m, 2H), 7.01-6.96 (m, 2H), 6.80 (m, 2H), 6.68 (bd, 1H, 1H), 4.61 (s, 2H), 4.25 (m, 6H), 1.25 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 22.03 min.; purity: 84%; MS (m/e): 441 (MH^+).

7.3.375 N4-(3-Ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926775)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidineamine with 3-hydroxyaniline gave N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 19.50 min.; purity: 84%; MS (m/e): 399 (MH^+).

7.3.376 N4-(4-Aminocarbonylmethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945171)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(4-aminocarbonylmethyleneoxyphenyl)-5-fluoro-4-pyrimidineamine and 3,4-ethylenedioxyaniline gave N4-(4-aminocarbonylmethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (acetone-d_6): δ δ 4.24-4.31 (m, 4H), 4.51 (s, 2H), 6.77 (d, J= 8.7 Hz, 1H), 6.95 (dm, J= 8.7 Hz, 1H), 7.06 (d, J= 9.3 Hz, 2H), 7.28 (m, 1H), 7.71 (d, J= 9.0 Hz, 2H), 8.15 (m, 1H); LCMS: 15.23 min, 97.05%; MS (m/e): 412.01 (MH^+).

7.3.377 (R935019): 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[di-(4-chlorophenyl)methyl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-4-pyrimidinediamine, 3-aminophenol and N-(2-chloro-5-fluoro-pyrimidinyl)-1,1-di(4-chlorophenyl)methylamine produced 5-fluoro-N2-(3-hydroxyphenyl)-N4-[di-(4-chlorophenyl)methyl]-2,4-pyrimidinediamine. LCMS: ret. time: 25.59 min.; purity: 91%; MS (*m/e*): 421 (MH^+-Cl).

7.3.378 (R935020): N4-(Fluoren-9-yl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine:

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-4-pyrimidinediamine, 2-chloro-N-(fluoren-9-yl)-5-fluoro-4-pyrimidineamine and 3-aminophenol were reacted to produce N4-(fluoren-9-yl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.85 (d, 1H, J= 2.9 Hz), 7.74 (d, 2H, J= 7.6 Hz), 7.64 (d, 2H, J= 7.6 Hz), 7.41-7.28 (m, 6H), 7.14-7.05 (m, 2H),

6.56 (d, 1H, J= 8.8 Hz), 5.28 (d, 1H, J= 8.8 Hz); LCMS: ret. time: 23.27 min.; purity: 89%; MS (*m/e*): 385 (MH^+).

7.3.379 (R935021): (±)-5-Fluoro-N4-[1-(4-fluorophenyl)ethyl]-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-4-pyrimidinediamine, 3-aminophenol and (±)-N-(2-chloro-5-fluoropyrimidinyl)-1-(4-fluorophenyl)ethylamine were reacted to produce the desired (±)-5-fluoro- N4-[1-(4-fluorophenyl)ethyl]-N2-(3-hydroxyphenyl)-2, 4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.79 (d, 1H, J= 3.3 Hz), 7.38-7.34 (dd, 2H, J= 5.2 and 8.5 Hz), 7.14 (t, 1H, J= 4.5 Hz), 7.09 (d, 1H, J= 8.5 Hz), 7.03 (d, 1H, J= 8.5 Hz), 6.84 (br s, 1H), 6.84-6.78 (ddd, 1H, J= 0.8, 2.0, and 8.2 Hz), 6.46-6.42 (ddd, 1H, J= 0.8, 2.0 and 8.2 Hz), 5.26 (overlapped dq, 1H, J= 7.1 and 7.9 Hz), 5.18 (d, 1H, J=7.1 Hz), 1.59 (d, 3H, J= 7.1 Hz); LCMS: ret. time: 21.52 min.; purity: 92%; MS (*m/e*): 343 (MH^+).

7.3.380 (R935023): (±)-5-Bromo-N4-[1-(4-fluorophenyl)ethyl]-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-4-pyrimidinediamine, 3-aminophenol and (±)-5-bromo-2-chloro-N4-[1-(4-fluorophenyl)ethyl]-4-pyrimidineamine were reacted to produce (±)-5-bromo- N4-[1-(4-fluorophenyl)ethyl]-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 7.97 (s, 1H), 7.36-7.31 (m, 2H), 7.17 (s, 1H), 7.09-7.01 (m, 4H), 6.82 (dd, 1H, J= 2.2 and 8.2 Hz), 6.46 (d, 1H, J= 2.2 and 8.2 Hz), 5.50 (br d, 1H, J= 7.0), 5.27 (overlapped dq, 1H, J= 7.1 and 7.9 Hz), 1.58 (d, 3H, J= 7.0 Hz); LCMS: ret. time: 22.64 min.; purity: 94%; MS (*m/e*): 404 (MH^+)

7.3.381 (R935025): 5-Bromo-N2-(3-hydroxyphenyl)-N4-(N-methyl-2-carbomethoxypyrrol-4-yl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-4-pyrimidinediamine, 3-aminophenol and 5-bromo-2-chloro-N-(N-methyl-2-carbomethoxypyrrol-4-yl)-4-pyrimidineamine were reacted to give 5-bromo-N2-(3-hydroxyphenyl)-N4-(N-methyl-5-carbomethoxypyrrol-4-yl)-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$ + CD_3OD): δ 7.92 (s, 1H), 7.58 (d, 1H, J= 8.0 Hz), 7.09 (d, 1H, J= 8.5 Hz), 7.04 (d, 1H, J= 8.5 Hz), 6.90 (d, 1H, J= 4.5 Hz), 6.81 (d, 1H, J= 1.8 Hz), 6.5 (m, 1H), 3.82 (s, 3H), 3.75 (s, 3H): LCMS: ret. time: 19.73 min.; purity: 90%; MS (*m/e*): 419 (MH^+)

7.3.382 (R935029): 4-Amino-5-bromo-N2-(3-hydroxyphenyl)-2-pyrimidineamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-4-pyrimidinediamine, 4-amino-5-bromo-2-chloropyrimidine and 3-aminophenol were reacted to give 4-amino-5-bromo-N2-(3-hydroxyphenyl)-2-pyrimidineamine. ^{1}H NMR (DMSO-d6): δ 10.33 (br s, 1H), 8.27 (s, 1H), 7.14-6.06 (m, 2H), 7.01 (d, 1H, J= 1.7 Hz), 6.54 (td, 1H, J= 1.7 Hz and 7.0 Hz).

7.3.383 R935134: 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

The reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-phenyl-1,2-4-oxadiazole were reacted in microwave at 180 ^{o}C for 10-20 minutes at 20 bar. Upon concentration and addition of 2N HCl provided 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.21 (br s, 1H), 9.91 (br s, 1H), 8.18 (d, 1H, J= 5.2 Hz), 8.03-7.99 (m, 2H), 7.61-7.53 (m, 3H), 7.46 (br d, 2H, J= 7.9 Hz), 7.14-7.01 (m, 5H), 6.54 (app d, 1H, J= 7.96 Hz), 5.56 (s, 2H); LCMS: ret. time: 24.61 min.; purity: 100%; MS (*m/e*): 471 (MH^+).

7.3.384 R935135: 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-phenyl-1,2-4-oxadiazole were reacted to provide 5-fluoro- N4-(4-isopropyloxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 10.21 (br s, 1H), 9.93 (br s, 1H), 8.17 (d, 1H, J= 5.2 Hz), 8.02-7.98 (m, 2H), 7.60-7.49 (m, 5H), 7.42 (app d, 2H, J= 7.0 Hz), 7.04 (d, 2H, J= 9.4 Hz), 6.89 (app d, 2H, J= 9.4 Hz), 5.56 (s, 2H), 4.58 (septet, 1H, J= 6.4 Hz), 1.23 (app d, 6H, J= 6.4 Hz); LCMS: ret. time: 26.90 min.; purity: 97%; MS (*m/e*): 513 (MH^+).

7.3.385 R935136: N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxy)phenyl-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-phenyl-1,2-4-oxadiazole were reacted provide N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 10.18 (br s, 1H), 9.12 (br s, 1H), 8.14 (d, 1H, 4.7 Hz), 8.02-7.97 (m, 2H), 7.65-7.52 (m, 3H), 7.44 (d, 2H, J= 8.8 Hz), 7.25-7.23 (m, 1H), 7.15-7.08 (m, 1H), 7.03 (d, 2H, J= 8.8 Hz), 6.81 (d, 1H, J= 8.8 Hz), 5.56 (s, 2H), 4.24-4.20 (m, 4H); LCMS: ret. time: 26.90 min.; purity: 97%; MS (*m/e*): 513 (MH^+).

7.3.386 R935137: 5-Fluoro-N4-(2-methoxycarbonylbenzofura-5-yl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(2-methoxycarbonylbenzofura-5-yl)-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-phenyl-1,2-4-oxadiazole were reacted to provide 5-fluoro-N4-(2-methoxycarbonylbenzofura-5-yl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.21 (br s, 1H), 9.79 (br s, 1H), 8.19 (d, 1H, J= 4.7 Hz), 8.09 (br s, 1H), 7.99 (dd, 2H, J= 2.3 and 8.2 Hz), 7.76-7.67 (m, 2H), 7.59-7.52 (m, 4H), 7.44 (d, 2H, J= 8.8 Hz), 7.02 (d, 2H, J= 8.8 Hz), 5.55 (s, 2H), 3.85 (s, 3H); LCMS: ret. time: 27.61 min.; purity: 92%; MS (*m/e*): 553 (MH^+).

7.3.387 R935138: 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-ehloro-5-fluoro-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 3-aminophenol were reacted to provide 5-fluoro-N2-(3-hydroxyphenyl)-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 8.12 (d, 1H, J= 4.7 Hz), 8.03-7.99 (m, 2H), 7.69 (dd, 2H, J=

3.5 and 8.8 Hz), 7.61-7.53 (m, 3H), 7.06 (d, 2H, J= 9.9 Hz), 6.98 (m, 3H), 6.38 (br s, 1H), 5.58 (s, 2H). LCMS: ret. time: 24.83 min.; purity: 96%; MS (*m/e*): 471 (MH^+).

7.3.388 R935139: 5-Fluoro-N2-(4-isopropoxyphenyl)-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 4-isopropoxyaniline were reacted to provide 5-fluoro- N2-(4-isopropoxyphenyl)-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 10.21 (br s, 1H), 9.78 (br s, 1H), 8.13 (d, 1H, J= 4.7Hz), 8.02-7.98 (m 2H), 7.65-7.53 (m, 5H), 7.34 (d, 2H, J= 7.6 Hz), 7.07 (d, 2H, J= 9.3 Hz), 6.86 (d, 2H, J= 8.8 Hz), 5.59 (s, 2H), 4.54 (sept, 1H, J= 5.8 Hz), 1.22 (d, 6H, J= 5.8 Hz); LCMS: ret. time: 29.64 min.; purity: 97%; MS (*m/e*): 513 (MH^+).

7.3.389 R935140: N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to provide N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.31 (br s, 1H), 9.59 (br s, 1H), 8.11 (d, 1H, J= 4.7 Hz), 8.03-7.99 (m, 2H), 7.68-7.49 (m, 5H), 7.14-7.08 (m, 1H), 7.06 (d, 2H, J= 8.8 Hz), 6.90 (d, 1H, J= 8.8 Hz), 6.76 (d, 1H, J= 8.8 Hz), 5.59 (s, 2H), 4.22-4.17 (m, 4H); LCMS: ret. time: 21.35 min.; purity: 95%; MS (*m/e*): 513 (MH^+).

7.3.390 R935141: 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine:

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-methyl-1,2-4-oxadiazole were reacted to provide 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-

methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 10.91 (br s, 1H), 9.91 (br s, 1H), 8.18 (d, 1H, J= 4.7 Hz), 7.43 (d, 2H, J= 8.8 Hz), 7.15-7.04 (m, 3H), 6.96 (d, 2H, J= 8.8 Hz), 6.58 (app d, 1H, J= 7.6 Hz), 5.43 (s, 2H), 2.34 (s, 3H); LCMS: ret. time: 18.68 min.; purity: 95%; MS (*m/e*): 409 (MH^+).

7.3.391 R935142: 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-methyl-1,2-4-oxadiazole were reacted to provide 5-fluoro-N4-(4-isopropoxyphenyl)-N2-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 8.16 (d, 1H, J= 5.2 Hz), 7.52 (dd, 2H, J= 3.5 Hz and 9.3 Hz), 7.40 (d, 2H, J= 8.8 Hz), 6.98 (d, 2H, J= 8.8 Hz), 6.88 (d, 2H, J= 9.3 Hz), 5.44 (s, 2H), 4.58 (sept, 1H, J= 5.8 Hz), 2.34 (s, 3H), 1.24 (d, 6H, J= 5.8 Hz); LCMS: ret. time: 24.47 min.; purity: 93%; MS (*m/e*): 451 (MH^+).

7.3.392 R935143: N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-ethylenedioxy)phenyl-4-pyrimidineamine and 5-(4-aminophenoxymethyl)-3-methyl-1,2-4-oxadiazole were reacted to provide N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 9.12 (br s, 1H), 9.04 (br s, 1H), 7.99 (d, 1H, J= 3.5 Hz), 7.55 (d, 2H, J= 1.7 and 8.8 Hz), 7.30 (d, 1H, J= 2.9 Hz), 7.17 (td, 1H, J= 2.9 and 8.8 Hz), 6.88 (d, 2H, J= 8.8 Hz), 6.77 (d, 1H, J= 8.8 Hz), 5.38 (s, 2H), 4.24-4.20 (m, 4H), 2.34 (s, 3H); LCMS: ret. time: 21.34 min.; purity: 97%; MS (*m/e*): 451 (MH^+).

7.3.393 R935144: 5-Fluoro-N2-(4-isopropoxyphenyl)-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 4-isopropoxyaniline were reacted to provide 5-fluoro- N2-(4-isopropoxyphenyl)-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the solid. ^{1}H NMR (DMSO-d6): δ 10.11 (br s, 1H), 9.72 (br s, 1H), 8.12 (s, 1H, J= 5.3 Hz), 7.61 (dd, 2H, J= 8.8 Hz), 7.34 (d, 2H, J= 7.3 Hz), 7.01 (d, 2H, J= 8.8 Hz), 6.84 (d, 2H, J= 8.8 Hz), 5.47 (s, 2H), 4.54 (septet, 1H, J= 5.8 Hz), 2.34 (s, 3H), 1.23 (d, 6H, J= 6.4 Hz); LCMS: ret. time: 24.31 min.; purity: 96%; MS (*m/e*): 451 (MH^+).

7.3.394 R935145: N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to provide N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.81 (br s, 1H), 9.67 (br s, 1H), 8.13 (d, 1H, J= 4.7 Hz), 7.63 (dd, 2H, J= 4.1 and 8.8 Hz), 7.07 (m, 1H), 7.00 (d, 2H, J= 8.8 Hz), 6.89 (d, 1H, J= 8.8 Hz), 6.76 (d, 1H, J= 8.8 Hz), 5.46 (s, 2H), 4.22-4-18 (m, 4H), 2.34 (s, 3H); LCMS: ret. time: 21.54 min.; purity: 97%; MS (*m/e*): 451 (MH^+).

7.3.395 R935146: 5-Fluoro-N2-(2-methoxycarbonylbenzofura-5-yl)-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to provide 5-fluoro-N2-(2-methoxycarbonylbenzofura-5-yl)-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.14 (d, 1H, J=

4.7 Hz), 8.02 (s, 1H), 7.63-7.56 (m, 5H), 7.02 (d, 2H, J= 8.8 Hz), 5.47 (s, 2H), 3.85 (s, 3H), 2.34 (s, 3H); LCMS: ret. time: 22.46 min.; purity: 97%; MS (*m/e*): 491 (MH^+).

7.3.396 R935147: 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine and 3-hydroxyaniline were reacted to provide 5-fluoro-N2-(3-hydroxyphenyl)-N4-[4-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine as fine flakes of the product. ^{1}H NMR (DMSO-d6): δ 8.11 (d, 1H, J= 4.6 Hz), 7.66 (d, 2H, J= 5.8 Hz), 7.06-6.97 (m, 5H), 6.42-40 (m, 1H), 5.46 (s, 2H), 2.35 (s, 3H); LCMS: ret. time: 19.00 min.; purity: 95%; MS (*m/e*): 409 (MH^+).

7.3.397 R935148: N2-(3,4-Ethylenedioxyphenyl)-N4-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, 2-Chloro--[4-[ethoxycarbonyl(dimethyl)methyl]phenyl]-5-fluoro-2, 4-pyrimidine amine and 3,4-ethylenedioxyaniline were reacted to produe N2-(3,4-ethylenedioxyphenyl)-N4-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.31 (s, 1H), 8.97 (s, 1H), 8.03 (d, 1H, J= 3.5 Hz), 7.70 (d, 2H, J= 8.8 Hz), 7.29 (d, 1H, J= 2.3 Hz), 7.23 (d, 2H, J= 8.8 Hz), 6.98 (dd,, 1H, J= 2.1 and 8.8 Hz), 6.66 (d, 1H, 8.2 Hz); 4.19-4.15 (m, 4H), 4.07 (qt, 2H, J= 7.0 Hz), 1.48 (s, 6H), 1.10 (t, 3H, J= 7.0 Hz); LCMS: ret. time: 24.51 min.; purity: 100%; MS (*m/e*): 453 (MH^+).

7.3.398 R935150: N2-[4-[(1-Ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(3-phenyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (or it can be prepared similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine), 2-chloro-5-fluoro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine and 4-[ethoxycarbonyl(dimethyl)methyl]aniline were reacted to produce N2-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N4-(4-isopropoxyphenyl)-2,4-

pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.18 (br s, 1H), 9.11 (br s, 1H), 8.01 (d, 1H, J= 3.5 Hz), 7.56 (d, 2H, J= 8.8 Hz), 7.54 (d, 2H, J= 8.8 Hz), 7.09 (d, 2H, J= 8.8 Hz), 6.86 (d, 2H, J= 8.8 Hz), 4.56 (sept, 1H, J= 5.8 Hz), 4.02 (qt, 2H, J= 7.0 Hz), 1.43 (s, 6H), 1.26 (d, 6H, J= 7.0 Hz), 1.09 (t, 3H, J= 7.0 Hz); LCMS: ret. time: 28.49 min.; purity: 98%; MS (*m/e*): 453 (MH^+).

7.3.399 R935179: N2-[4-(2,3-Dihydroxypropoxy)phenyl]- N4-(3,4-ethylenedioxypheny)-5-fluoro-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3,4-ethylenedioxyphenyl)-4-pyrimidineamine and 4-(2,3-dihydroxypropoxy)aniline were reacted to produce N2-[4-(2,3-dihydroxypropoxy)phenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.09 (s, 1H), 8.95 (s, 1H), 7.98 (d, 1H, J= 3.5 Hz), 7.51 (d, 2H, J= 8.8 Hz), 7.32 (d, 1H, J= 2.3 Hz), 7.17 (dd, 1H, J= 2.3 and 8.8 Hz), 6.77 (dd, 3H, J= 8.8 Hz), 4.90 (d, 1H, J= 5.3 Hz), 4.64 (t, 1H, J= 5.8 Hz), 4.23-4.19 (m, 4H), 3.91-3.89 (m, 1H), 3.80-3.73 (m, 2H), 3.41 (t, 2H, J= 5.3 Hz); LCMS: ret. time: 15.04 min.; purity: 96%; MS (*m/e*): 429 (MH^+).

7.3.400 R935180: N2-[4-(2,3-Dihydroxypropoxy)phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(3-hydroxyphenyl)-4-pyrimidineamine and 4-(2,3-dihydroxypropoxy)aniline were reacted to produce N2-[4-(2,3-dihydroxypropoxy)phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.38 (s, 1H), 9.18 (s, 1H), 8.98 (s, 1H), 8.12 (d, 1H, J= 3.5 Hz), 7.58 (d, 2H, J= 8.8 Hz), 7.22 (d, 1H, J= 2.3 Hz), 7.12 (dd, 2H, J= 2.3 and 8.8 Hz), 6.79 (d, 2H, J= 8.8 Hz), 6.45 (d, 1H, J= 8.8 Hz), 4.91 (d, 1H, J= 5.3 Hz), 4.65 (t, 1H, J= 5.8 Hz), 3.92-3.89 (m, 1H), 3.79-3.74 (m, 2H), 3.44 (t, 2H, J= 5.3 Hz); LCMS: ret. time: 12.79 min.; purity: 89%; MS (*m/e*): 387 (MH^+).

7.3.401 R935175: N2-[4-(2,3-Dihydroxypropoxy)phenyl]-5-fluoro-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N-(4-isoproxyphenyl)-4-pyrimidineamine and 4-(2,3-dihydroxypropoxy)aniline were reacted to produce N2-[4-(2,3-

dihydroxypropoxy)phenyl]-5-fluoro-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine: ^{1}H NMR (DMSO-d6): δ 9.12 (s, 1H), 8.91 (s, 1H), 7.97 (d, 1H, J= 3.5 Hz), 7.58 (d, 2H, J= 8.8 Hz), 7.49 (d, 2H, J= 8.8 Hz), 6.85 (d, 2H, J= 8.8 Hz), 6.76 (d, 2H, J= 8.8 Hz); 4.89 (d, 1H, J= 4.7 Hz), 4.63 (t, 1H, J= 5.2 Hz), 4.56 (septet, 1H, J= 5.8 Hz), 3.90-3.89 (m, 1H), 3.76-3.73 (m, 2H), 3.41 (t, 2H, J= 5.3 Hz), 1.25 (d, 6H, J= 5.8 Hz); LCMS: ret. time: 17.48 min.; purity: 98%; MS (*m/e*): 429 (MH^+).

7.3.402 R935169: N4-[4-[(1-Ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-4-pyrimidineamine and 3-aminophenol were reacted to produce N4-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 7.87 (d, 1H, J= 3.5 Hz), 7.56 (d, 2H, J= 8.8 Hz), 7.35 (d, 2H, J= 8.8 Hz), 7.25-7.23 (m, 1H), 7.08 (t, 1H, J= 8.2 Hz), 6.91 (d, 1H, J= 2.3 Hz), 6.83 (d, 1H, J= 7.6 Hz), 6.50 (dd, 1H, J= 1.7 and 8.2 Hz), 4.13 (qt, 2H, J= 7.0 Hz), 1.58 (s, 6H), 1.19 (t, 3H, J= 7.0 Hz); LCMS: ret. time: 22.97 min.; purity: 98%; MS (*m/e*): 411 (MH^+).

7.3.403 R935164: 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-[(N-methyl-2-methoxycarbonyl)pyrrol-4-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2,4-dichloro-5-fluoropyrimidine, 2-chloro-5-fluoro-N4-(4-isopropoxyphenyl)-4-pyrimidineamine and and N-methyl-2-methoxycarbonyl-4-aminopyrrole hydrochloride with added diisopropylethylamine were reacted to produce the desired product 5-fluoro-N4-(4-isopropoxyphenyl)-N2-[(N-methyl-2-carbomethoxy)pyrrol-4-yl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.87 (br s, 1H), 7.44 (d, 2H, J= 8.8 Hz), 7.08 (br s, 1H), 6.99-6.85 (m, 3H), 6.70 (d, 1H, J= 2.3 Hz), 6.63 (d, 1H, J= 1.7 Hz), 4.52 (septet, 1H, J= 5.8 Hz), 3.80 (s, 3H), 3.79 (s, 3H), 1.34 (d, 6H, J= 5.8 Hz); LCMS: ret. time: 23.89 min.; purity: 99%; MS (*m/e*): 400 (MH^+).

7.3.404 R935165: 5-Fluoro-N2-(4-isopropoxyphenyl)-N4-[(N-methyl-2-carbomethoxy)pyrrole-4-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(N-methyl-2-

carbomethoxypyrrol-4-yl)-4-pyrimidineamine and 4-isopropoxyaniline were reacted to produce 5-fluoro-N2-(4-isopropoxyphenyl)-N4-[(N-methyl-5-carbomethoxy)pyrrol-4-yl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.84 (d, 1H, J= 2.3 Hz), 7.36 (d, 2H, J= 8.8 Hz), 7.22 (d, 1H, J= 1.1 Hz), 6.87 (d, 2H, J= 8.8 Hz), 6.84 (s, 1H), 6.77 (d, 1H, J= 1.7 Hz), 6.61 (br s, 1H), 4.49 (septet, 1H, J= 5.8 Hz), 3.82 (d, 3H), 3.81 (s, 3H), 1.33 (d, 6H, J= 5.8 Hz); LCMS: ret. time: 23.36 min.; purity: 96%; MS (*m/e*): 400 (MH^+).

7.3.405 R935166: N2-(3,4-Ethylenedioxyphenyl)- 5-fluoro-N4-[(N-methyl-2-methoxycarbonyl)pyrrol-4-yl]-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(N-methyl-2-methoxycarbonylpyrrol-2-yl)-4-pyrimidineamine and 3,4-ethylenedioxyaniline were reacted to produce 5-fluoro-N2-(3,4-ethylenedioxyphenyl)-N4-[(N-methyl-2-carbomethoxy)pyrrol-4-yl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.84 (d, 1H, J= 3.5 Hz), 7.34 (s, 1H), 7.21 (s, 1H), 6.82 (d, 2H, J= 8.8 Hz), 6.76 (d, 2H, J= 8.8 Hz), 6.58 (s, 1H), 4.27-4.18 (m, 4H), 3.90 (s, 3H), 3.81 (s, 3H); LCMS: ret. time: 20.02 min.; purity: 93%; MS (*m/e*): 400 (MH^+).

7.3.406 R935167: N4-[4-[(1-Ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N2-(4-isopropoxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro -N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-[4-[1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-4-pyrimidineamine and 4-isopropoxyaniline were reacted to produce N4-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N2-(4-isopropoxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 9.29 (s, 1H), 8.95 (s, 1H), 8.02 (d, 1H, J= 4.1 Hz), 7.68 (d, 2H, J= 8.8 Hz), 7.46 (d, 2H, J= 8.8 Hz), 7.22 (d, 2H, J= 8.8 Hz), 6.75 (d, 2H, J= 8.8 Hz), 4.48 (septet, 1H, J= 5.8 Hz), 4.04 (qt, 2H, J= 7.0 Hz), 1.47 (s, 6H), 1.22 (d, 6H, J= 5.8 Hz), 1.10 (t, 3H, J= 7.0 Hz); LCMS: ret. time: 28.11 min.; purity: 99%; MS (*m/e*): 453 (MH^+).

7.3.407 R935159: 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[3-hydroxyphenyl]-pyrimidine-2,4-diamine, 2-chloro-5-fluoro-N4-(4-isopropoxyphenyl)-4-

pyrimidineamine and methl 4-aminophenoxyacetate were reacted to produce 5-fluoro-N4-(4-isopropoxyphenyl)-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.88 (d, 1H, J= 3.5 Hz), 7.46 (d, 2H, J= 8.8Hz), 7.42 (d, 2H, J= 8.8 Hz), 6.88 (d, 2H, J= 9.3 Hz), 6.85 (d, 2H, J= 9.3 Hz), 6.78 (br s, 1H), 6.63 (br d, 1H, J= 2.3 Hz), 4.61 (s, 2H), 4.53 (septet, 1H, J= 6.4 Hz), 3.81 (s, 3H), 1.35 (d, 6H, J= 6.4 Hz); LCMS: ret. time: 23.19 min.; purity: 97%; MS (*m/e*): 427 (MH^+).

7.3.408 R935157: N4-[4-[(1-Ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[3-hydroxyphenyl]-pyrimidine-2,4-diamine, 2-chloro-N4-[4-[1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-4-pyrimidineamine was reacted with 4-(methoxycarbonylmethyleneoxy)aniline to produce N4-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.92 (s, 1H), 7.55 (d, 2H, J= 8.7 Hz), 7.43 (d, 2H, J= 9.3 Hz), 7.33 (d, 2H, J= 8.7 Hz), 6.87 (d, 2H, J= 9.3 Hz), 6.79 (s, 1H), 6.73 (d, 1H, J= 2.3 Hz), 4.62 (s, 2H), 4.13 (qt, 2H, J= 7.0 Hz), 3.81 (s, 3H), 1.59 (s, 6H), 1.20 (t, 3H, 7.0 Hz); LCMS: ret. time: 25.20 min.; purity: 97%; MS (*m/e*): 483 (MH^+).

7.3.409 R935152: N2-[4-[(1-Ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine

In like manner to the preparation of N2-[4-(1-ethoxycarbonyl-1-methyl)ethyl)phenyl]-5-fluoro-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 4-[1-ethoxycarbonyl-1-methyl)ethyl]aniline were reacted to give N2-[4-[(1-ethoxycarbonyl-1-methyl)ethyl]phenyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.89 (d, 1H, J= 2.9 Hz), 7.24-7.10 (m, 5H), 6.93 (d, 1H, J= 7.6 Hz), 6.68 (d, 2H, J= 8.2 Hz), 4.08 (qt, 2H, J= 7.0 Hz), 1.52 (s, 3H), 1.49 (s, 3H), 1.16 (t, 3H, J= 7.0 Hz); LCMS: ret. time: 22.15 min.; purity: 96%; MS (*m/e*): 411 (MH^+).

7.3.410 N2-(3-*tert*-Butylphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R940257)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-

hydroxyphenyl)-4-pyrimidineamine with 3-*tert*-buthylaniline gave N2-(3-*tert*-butylphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 23.82 min.; purity: 100%; MS (m/e): 353 (MH^+); ^1H NMR ($CDCl_3$): δ 7.96 (1H, d, J= 3 Hz), 7.61 (1H, ddd, J= 7.5, 2.2 and 0.9 Hz), 7.49 (1H, t, J= 2.5 Hz), 7.27 (1H, m), 7.18 (1H, t, J= 8.1 Hz), 7.99 (1H, m), 6.94 (1H, s), 6.91 (1H, dd, J= 7.5 and 2.5 Hz), 6.80 (1H, d, J= 7.5 Hz), 6.72 (2H, m), 6.58 (1H, ddd, J= 7.5, 2.5 and 0.9 Hz), 6.52 (1H, ddd, J= 7.5, 2.5 and 0.9 Hz), 1.28 (9H, s).

7.3.411 N4-(3-Chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and N4-(3-chloro-4-hydroxy-5-methylphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940258)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-chloro-4-hydroxy-5-methylphenyl)-4-pyrimidineamine with ethyl 3-aminophenoxyacetate gave a mixture of N4-(3-chloro-4-hydroxy-5-methylphenyl)- 5-fluoro-N2-(3-methoxycarbonylmethylcneoxyphenyl)-2,4-pyrimidinediamine and N4-(3-chloro-4-hydroxy-5-methylphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.34 min. (CO_2Me); purity: 17%; MS (m/e): 432 (M^+); LCMS: ret. time: 21.83 min; purity 78%; MS (m/e): 446 (M^+).

7.3.412 N2-(3-*tert*-Butylphenyl)-N4-(3,4-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940260)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3,4-dimethoxyphenyl)-4-pyrimidineamine with ethyl 3-*tert*-buthylaniline gave N2-(3-*tert*-butylphenyl)-N4-(3,4-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 24.87 min.; purity: 99%; MS (m/e): 397 (MH^+); ^1H NMR ($CDCl_3$): δ 7.92 (1H, d, J= 3.4 Hz), 7.50 (1H, d, J= 8 Hz), 7.28 (1H, t, J= 2.3 Hz), 7.21 (1H, d, J= 8 Hz), 718 (1H, m), 7.08-7.01 (2H, m), 6.99 (1H, s), 6.84 (2H, d, J= 9.2 Hz), 6.65 (1H, s), 3.89 (3H, s), 3.72 (3H, s), 1.26 (9H, s).

7.3.413 N2-[2-(N-Benzylpiperazino)ethyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R940261)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 4-(N-benzylpiperazino)ethylamine gave N2-[2-(N-benzylpiperazino)ethyl]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 17.15 min.; purity: 90 %; MS (m/e): 422 (M^+), 423 (MH^+); ^{1}H NMR ($CDCl_3$): δ 8.42 (1H, s), 7.82 (1H, d, J= 3.9 Hz), 7.32-7.08 (6H, m), 6.73 (1H, s), 6.61 (1H, dd, J= 8.1 and 2.1 Hz), 6.51 (1H, d, J= 7.5 Hz), 5.18 (1H, s), 3.59 (2H, m), 3.02 (2H, m), 2.71-2.41 (3H, m), 2.10-1.16 (5H, m).

7.3.414 N2-[2-(N-Benzylpiperazino)ethyl]-N4-(3,4-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940262)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3,4-dimethoxyphenyl)-4-pyrimidineamine with 4-(N-benzylpiperazino)ethylamine gave N2-[2-(N-benzylpiperazino)ethyl]-N4-(3,4-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 17.48 min.; purity: 99 %; MS (m/e): 466 (M^+), 467 (MH^+); ^{1}H NMR ($CDCl_3$): δ 7.82 (1H, d, J= 3.9 Hz), 7.44 (1H, s), 7.33-7.10 (6H, m), 7.04 (1H, dd, J= 8.9 and 2.5 Hz), 6.84 (1H, d, J= 8.9 Hz), 6.58 (1H, s), 5.40 (1H, s), 3.91 (3H, s), 3.87 (3H, s), 3.41 (2H, m), 2.87 (2H, m), 2.51 (3H, m), 1.80 (2H, m), 1.60 (4H, m), 1.30 (1H, m).

7.3.415 N2-[4-(N-Benzylpiperidino)]-N4-(3,4-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940263)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3,4-dimethoxyphenyl)-4-pyrimidineamine with N-benzyl-4-aminopiperidine gave N2-[4-(N-benzylpiperidino)]-N4-(3,4-dimethoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 15.52 min.; purity: 99 %; MS (m/e): 438 (MH^+); ^{1}H NMR ($CDCl_3$): δ 7.81 (1H, d, 3.3 Hz), 7.35-7.18 (5H, m), 7.10 (1H, dd, J= 8.7 and 2.6 Hz), 6.84 (1H, d, J= 8.7 Hz), 6.56 (1H, s), 4.73 (1H, d, J= 6.9 Hz), 3.89 (6H, s), 3.75 (1H, m), 3.51 (2H, m), 2.81 (2H, m), 2.15 (2H, m), 2.00 (2H, m), 1.66-1.44 (4H, m).

7.3.416 N2-[4-(N-Benzylpiperidino)]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R940264)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with N-benzyl-4-aminopiperidine gave N2-[4-(N-benzylpiperidino)]-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 14.00 min.; purity: 96 %; MS (m/e): 394 (M^+), 395 (MH^+); ^{1}H NMR ($CDCl_3$): δ 7.81 (1H, d, J= 3.6 Hz), 7.40-7.28 (5H, m), 7.21-7.14 (2H, m), 6.69 (1H, m), 6.62 (1H, m), 6.59 (1H, m), 5.20 (1H, s), 3.65 (2H, s), 3.50 (1H, s), 3.03 (1H, m), 2.83 (1H, m), 2.13 (1H, m), 1.95-1.70 (1H, m), 1.58 (4H, m).

7.3.417 N4-(3-*tert*-Butylphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940270)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N4-(3-*tert*-butylphenyl)-2-chloro-5-fluoro-4-pyrimidineamine with ethyl 3-aminophenoxyacetate gave N4-(3-*tert*-butylphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 27.30 min.; purity: 98 %; MS (m/e): 439 (MH^+); ^{1}H NMR (DMSO-d6): δ 9.50 (1H, s), 9.33 (1H, s), 8.11 (1H, dd, J=4.2 and 1.8 Hz), 7.81 (1H, d, J= 7.2 Hz), 7.49 (1H, t, 2.4 Hz), 7.30-7.28 (3H, m), 7.14-7.03 (2H, m), 6.46 (1H, d, J= 7.8 Hz), 4.57 (2H, s), 4.13 (2H, q, J= 7.2 Hz), 1.23 (9H, s), 1.18 (3H, t, J= 7.2 Hz).

7.3.418 N4-(3-*tert*-Butylphenyl)-N2-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-2,4-pyrimidinediamine (R940271)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N4-(3-*tert*-butylphenyl)-2-chloro-5-fluoro-4-pyrimidineamine with 3-chloro-4-hydroxy-5-methylaniline gave N4-(3-*tert*-butylphenyl)-N2-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 25.46 min.; purity: 100 %; MS (m/e): 400 (M^+); ^{1}H NMR (DMSO-d6): δ 9.63 (1H, s), 9.30 (1H, s), 8.82 (1H, s), 8.20 (1H, d, J= 3.9 Hz), 7.92 (1H, d, J= 8,8 Hz), 7.58 (2H, m), 7.40-7.20 (3H, m) 2.22 (3H, s), 1.35 (9H, s).

7.3.419 N2-(3-*tert*-Butylcarbonylaminophenyl)-N4-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R940275)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 3-butylcarbonylaminoaniline gave N2-(3-*tert*-butylcarbonylaminophenyl)-N4-(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.19 min.; purity: 91 %; MS (m/e): 396 (MH^+); 1H NMR (DMSO-d6): δ 9.42 (1H, s), 9.28 (1H, s), 9.21 (1H, s), 9.18 (1H, s), 8.17 (1H, d, J= 3.9 Hz), 7.90 (1H, s), 7.55 (1H, dt, J= 6.9 and 2.1 Hz), 7.51 (1H, dd, J= 7.8 and 1.5 Hz), 7.26-7.13 (4H, m), 6.57 (1H, dd, J= 7.5 and 1.5 Hz), 1.30 (9H, s).

7.3.420 N4-(3,3-Dihydroisobenzofuranyl-1-one-6-yl)-5-fluoro-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine R940294

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hyroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,3-dihydroisobenzofuranyl-1-one-6-yl)-5-fluoro-4-pyrimidineamine and 2-methoxycarbonyl-5-aminobenzofuran were reacted to give N4- (3,3-dihydroisobenzofuranyl-1-one-6-yl)-5-fluoro-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine. LCMS: ret. time: 21.34 min.; purity: 97 %; MS (m/e): 434 (M^+); 1H NMR (DMSO-d6): δ 9.90 (1H, s), 9.61 (1H, s), 8.4-8.12 (4H, m), 7.35-7.67 (4H, m), 5.50 (2H, s), 3.98 (3H, s).

7.3.421 N2-[3-Ethoxycarbonylmethyleneoxyphenyl]-N4-(3,3-dihydroisobenzofuranyl-1-one-6-yl)-5-fluoro-2,4-pyrimidinediamine R940285

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hyroxyphenyl)-2,4-pyrimidinediamine, 2-chloro-N4-(3,3-dihydroisobenzofuranyl-1-one-6-yl)-5-fluoro-4-pyrimidineamine and ethyl 3-aminophenoxyacetate were reacted to give N2-(3-ethoxycarbonylmethyleneoxyphenyl)-N4-(3,3-dihydroisobenzofuranyl-1-one-6-yl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.55 min.; purity: 76 %; MS (m/e): 438 (M^+), 440 (MH^+); 1H NMR (DMSO-d6): δ 9.70 (1H, s), 9.30 (1H, s), 8.23-8.06 (1H, m), 8.05 (1H, s), 7.63 (1H, d, J= 8.1 Hz), 7.30 (1H, s), 7.22 (1H, m), 7.08 (1H, t, J= 8.1 Hz), 6.43 (1H, d, J= 8.1 Hz), 5.37 (1H, s), 5.37 (2H, s), 4.60 (2H, s), 4.13 (2H, q, J= 7.2 Hz), 1.18 (3H, t, J= 7.2 Hz).

7.3.422 N2-(3,5-Dimethoxyphenyl)-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926804)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-4-pyrimidineamine with 3,5-dimethoxyaniline gave N2-(3,5-dimethoxyphenyl)-N4-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 24.12 min.; purity: 86%; MS (m/e): 443 (MH^+).

7.3.423 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-(3-trifluoromethylphenyl)]-2,4-pyrimidinediamine (R926805)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 3-trifluoromethylaniline gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-trifluoromethylphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 25.88 min.; purity: 89%; MS (m/e): 407 (MH^+).

7.3.424 N2-(2-Ethoxycarbonylindol-7-yl)-N4-(3,4-ethylcnedioxyphenyl)-5-fluoro-2,4-pyridinediamine (R926808)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 2-ethoxycarbonyl-7-aminoindole gave N2-(2-ethoxycarbonylindol-7-yl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyridinediamine. LCMS: ret. time: 24.11 min.; purity: 88%, MS (m/e): 450 (MH^+).

7.3.425 N4-[4-(4,5-Dichloro-1H-imidazol-1-yl)phenyl]-5-fluoro-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R926809)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N-4-[4-(4,5-dichloro-1H-imidazol-1-yl)phenyl]-2-chloro-5-fluoro-4-pyrimidineamine with ethyl-3-aminophenoxyacetate gave N4-[4-(4,5-dichloro-1H-imidazol-1-ylphenyl)]-5-fluoro-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 25.22 min, purity: 77%; MS (m/e): 519 (MH^+).

7.3.426 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[3-(1,3-oxazol-5-yl)phenyl]-2,4-pyrimidinediamine (R926813)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine with 3-(1,3-oxazol-5-yl)aniline gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(1,3-oxazol-5-yl)phenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 20.25 min.; purity: 81%, MS (m/e): 406 (MH^+).

7.3.427 N2-(2-Ethoxycarbonylindol-7-yl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyridinediamine (R926814)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine with 2-ethoxycarbonyl-7-aminoindol gave N2-(2-ethoxycarbonylindol-7-yl)-5-fluoro N4-(3-hydroxyphenyl)-2,4-pyridinediamine. LCMS: ret. time: 25.94 min.; purity: 91%.

7.3.428 N2-(3-Aminophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950207)

N4-(3,4-Ethylenedioxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine (50 mg, 0.18 mmol) was dissolved in dry MeOH (1 ml), to it was added 3-aminoaniline (163 mg, 1.2 mmol) and the mixture was refluxed for 4 days (70 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$–Acetone, 9:1) to give N2-(3-aminophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^1H NMR (CD_3OD): δ 7.66 (d, 1H, J= 3.6 Hz), 7.18 (d, 1H, J= 2.1 Hz), 7.09 (t, 1H, J= 2.1 Hz), 6.80-6.90, (m, 1H), 6.69 (d, 1H, J= 8.1 Hz), 6.57 (m, 1H), 6.20 (m, 1H), 6.60 (m, 1H), 4.10 (m, 4H); LCMS purity: 90.7%; MS (m/e): 354.13 (M^+, 100).

7.3.429 N4-(3,4-Ethylenedioxyphenyl)-N2-(3-ethoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine (R950186)

In like manner to the preparation of N2-(3-aminophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N4-(3,4-ethylenedioxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine and 3-ethoxycarbonylmethyleneaminophenylaniline were reacted to prepare N4-(3,4-ethylenedioxyphenyl)-N2-(3-

ethoxycarbonylmethyleneaminophenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 23.29 min.; purity: 95.7%; MS (m/e): 440.41 (MH^+).

7.3.430 N4-(3,5-Dichloro-4-hydroxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950185)

In like manner to the preparation of N2-(3-aminophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 2-chloro-N4-(3,5-dichlorophenyl-4-hydroxy)-5-fluoro-4-pyrimidineamine and ethyl 3-aminophenoxyacetate were reacted to prepare N4-(3,5-dichloro-4-hydroxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 22.51 min.; purity: 96.1%; MS (m/e): 466.88 (MH^+).

7.3.431 N4-(3-Aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-2,4-pyrimidinediamine (R950162)

A mixture of N4-(3-aminophenyl)-2-chloro-5-fluoro-4-pyrimidineamine (10 mg, 0.06 mmol) and 2-methoxycarbonyl-5-aminobenzofuran (36 mg, 0.18 mmol) in dry MeOH (0.5 ml) was refluxed for 2 days (100 °C oil-bath temperature). The mixture was cooled to 22 °C, concentrated to dryness under reduced pressure and subjected to column chromatography on silica gel ($CHCl_3$:Acetone, 9:1) to give N4-(3-aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 8.24 (s, 1H), 7.96 (dd, 1H, J= 1.7, 3.5 Hz), 7.46-7.59 (m, 3H), 6.93-6.99 (m, 2H), 6.84 (d, 1H, J= 8.2 Hz), 6.35 (m, 1H), 3.84 (s, 3H); LCMS purity: 97.8%; MS (ES) m/e 394.02 (M^+, 70).

7.3.432 N4-(3-Aminophenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R950163)

In like manner to the preparation of N4-(3-aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-5-fluoro-2,4-pyrimidinediamine, N4-(3-aminophenyl)-2-chloro-5-fluoro-4-pyrimidineamine and 3-hydroxyaniline were reacted to prepare N4-(3-aminophenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 7.94 (d, 1H, J= 4.1 Hz), 7.20 (m, 2H), 6.89-7.00 (m, 4H), 6.30 (m, 2H); LCMS: ret. time: 11.92 min.; purity: 95.0%; MS (m/e): 312.09 (MH^+).

7.3.433 N4-(3-Aminophenyl)-5-fluoro-N2-(3-isopropoxyphenyl)-2,4-pyrimidinediamine (R950164)

In like manner to the preparation of N4-(3-aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-5-fluoro-2,4-pyrimidinediamine, N4-(3-aminophenyl)-2-chloro-5-fluoro-4-pyrimidineamine and 3-isopropoxyaniline were reacted to prepare N4-(3-aminophenyl)-5-fluoro-N2-(3-isopropoxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 17.52 min.; purity: 98.9%; MS (m/e): 354.13 (MH^+).

7.3.434 N4-(3-Aminophenyl)-5-fluoro-N2-(4-isopropoxyphenyl)-2,4-pyrimidinediamine (R950165)

In like manner to the preparation of N4-(3-aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-5-fluoro-2,4-pyrimidinediamine, N4-(3-aminophenyl)-2-chloro-5-fluoro-4-pyrimidineamine and 4-isopropoxyaniline were reacted to prepare N4-(3-aminophenyl)-5-fluoro-N2-(4-isopropoxyphenyl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-D6–MeOD, 300 MHz): δ 7.90 (d, 1H, J= 4.1 Hz), 7.47 (m, 2H), 7.03 (t, 1H, J= 1.7 Hz), 6.60-6.95 (m, 5H), 6.29 (m, 1H), 4.43 (septett, 1H, J= 6.0 Hz), 1.18 (d, 6H, J= 6.0 Hz); LCMS: ret. time: 17.11 min.; purity: 88.4%; MS (m/e): 354.09 (MH^+).

7.3.435 N2-(3-Furylmethylene)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R950210)

In like manner to the preparation of N4-(3-aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 3-furylmathylamine were reacted to prepare N2-(3-furylmethylene)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 16.03 min.; purity: 93.5%; MS (m/e): 301.10 (MH^+).

7.3.436 5-Fluoro-N4-(3-hydroxyphenyl)-N2-(4-methoxyphenyloxyethyleneamino)-2,4-pyrimidinediamine (R950211)

In like manner to the preparation of N4-(3-aminophenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofurane-5-yl)-5-fluoro-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine and 2-(4-methoxyphenyl)ethylamine were reacted to prepare 5-fluoro-N4-(3-hydroxyphenyl)-N2-(4-methoxyphenyloxyethyleneamino)-2,4-pyrimidinediamine. LCMS: ret. time: 18.88 min.; purity: 97.6%; MS (m/e): 371.09 (MH^+).

7.3.437 N4-(3-Aminophenyl)-N2-[[N3-[N4-(3-aminophenyl)]-5-fluoro-2,4-pyrimidinediamine]aminophenyl]-5-fluoro-2,4-pyrimidinediamine (R950137)

2,4-Dichloro-5-fluoropyrimidine and 3-aminoaniline were reacted to prepare N4-(3-aminophenyl)-N2-[[N3-[N4-(3-aminophenyl)]-5-fluoro-2,4-pyrimidinediamine]aminophenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 13.10 min.; purity: 96.4%; MS (m/e): 513.01 (MH^+).

7.3.438 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[3-(hydroxyethyleneamino)phenyl]-2,4-pyrimidinediamine (R950208)

N2-(3-Aminophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine and 2-bromoethanol were reacted together to give N4-(3,4-ethylenedioxyphenyl)-N2-[3-(hydroxyethylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 15.44 min.; purity: 98.6%; MS (m/e): 398.05 (MH^+).

7.3.439 N2-[3-Bis(hydroxyethyl)aminophenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R950209)

N2-(3-Aminophenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine and 2-bromoethanol were reacted together to give N2-[3-bis(hydroxyethyl)aminophenyl]-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 15.64 min.; purity: 97.8%; MS (m/e): 442.06 (MH^+).

7.3.440 6-Ethoxycarbonyl-N4-(ethoxycarbonylmethyl)-N2-(4-ethoxycarbonylmethyleneoxyphenyl)-5-nitro-2,4-pyrimidinediamine (R925858)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-hydroxyphenyl)-2,4-pyrimidinediamine, N-(2-chloro-6-ethoxycarbonyl-5-nitro-4-pyrimidinyl)glycine ethyl ester and ethyl 4-aminophenoxyacetate were reacted to yield 6-ethoxycarbonyl-N4-(ethoxycarbonylmethyl)-N2-(4-ethoxycarbonylmethyleneoxyphenyl)-5-nitro-2,4-pyrimidinediamine. ^1H NMR ($CDCl_3$): δ 9.00 (bs, 1H), 7.49 (bs, 1H), 7.41 (d, 2H, J= 9.0 Hz), 6.89 (d, 2H, J= 9.0 Hz), 4.62 (s, 2H), 4.46 (q, 2H, J= 7.2 Hz), 4.31-4.19 (m, 6H), 1.40 (t, 3H, J= 7.2 Hz), 1.33-1.25 (m, 6H); LCMS: ret. time: 30.00 min.; purity: 98 %; MS (m/e): 492 (MH^+).

7.3.441 N4-Benzyloxy-5-ethoxycarbonyl-N2-(3,4-ethylenedioxyphenyl)-2,4-pyrimidinediamine (R925837)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-benzyloxy-2-chloro-5-ethoxycarbonyl-4-pyrimidineamine and 1,4-benzodioxan-6-amine were reacted to yield N4-benzyloxy-5-ethoxycarbonyl-N2-(3,4-ethylenedioxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 8.55 (s, 1H), 7.49-7.44 (m, 3H), 7.39-7.34 (m, 4H), 7.30-7.22 (m, 1H), 6.67 (d, 1H, J= 8.4 Hz), 4.98 (s, 2H), 4.23-4.17 (m, 6H), 1.26 (t, 3H, J= 7.2 Hz); LCMS: ret. time: 26.14 min.; purity: 95%; MS (m/e): 423 (MH^+).

7.3.442 N4-Benzyloxy-5-ethoxycarbonyl-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R925824)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, N4-benzyloxy-2-chloro-5-ethoxycarbonyl-4-pyrimidineamine and 3-hydroxyaniline were reacted to yield N4-benzyloxy-5-ethoxycarbonyl-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 24.28 min.; purity: 88 %; MS (m/e): 381 (MH^+).

7.3.443 N2,N4-Bis[4-(aminocarbonylmethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (R945025)

A mixture of 4-nitrophenol (7.65 g, 55 mmol), 2-bromoacetamide (6.90 g, 50 mmol) and K_2CO_3 (13.8 g, 0.1 mol) in acetone (50 mL) was stirred at room temperature for 24 h. The reaction mixture was diluted with water, and acetone was removed under reduced pressure. The formed light-yellow precipitate was collected by filtration, washed with water and dried to give 1-aminocarbonylmethyleneoxy-4-nitrobenzene (8.28 g, 84%).

Hydrogenation of 1-aminocarbonylmethyleneoxy-4-nitrobenzene (3 g, 15 mmol) in methanol (50 mL) catalyzed by 10% Pd-C (500 mg) and Na_2SO_4 (500 mg) at 50 psi for 2h gave 4-(aminocarbonylmethyleneoxy)aniline (2.59 g, quant.).

4-(Aminocarbonylmethyleneoxy)aniline (500 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (200 mg, 1.2 mmol) were dissolved in methanol (10 mL) and water (1 mL) and was stirred at 70 °C for 24 h. Then methanol was removed under reduced pressure. The remaining aqueous solution was acidified with 1 N HCl (80 mL). The formed white precipitate was collected by filtration to give N2,N4-bis[4-(aminoearbonylmethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (370 mg, 72%). ^{1}H

NMR (acetone-d_6): δ 4.46 (s, 2H), 4.50 (s, 2H), 6.81 (br, NH, 2H), 6.91 (d, J= 9.0 Hz, 2H), 6.98 (d, J= 9.0 Hz, 2H), 7.20 (br, 2H, NH), 7.63 (d, J= 9.3 Hz, 2H), 7.72 (d, J= 8.7 Hz, 2H), 7.93 (d, J=3.6 Hz, 1H), 8.27 (br, 1H, NH), 8.44 (br, 1H, NH); LCMS: ret. time: 13.91 min.; purity: 100%; MS (m/e): 427.02 (MH^+).

7.3.444 N2,N4-Bis[4-(cyanomethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (R945032)

To a solution of N2,N4-bis[4-(aminocarbonylmethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (200 mg, 0.47 mmol) in THF (10 mL) was added trifluoroacetic anhydride (0.33 mL, 2.35 mmol) and pyridine (0.38 mL, 4.7 mmol) at room temperature and was stirred at room temperature overnight. The mixture was diluted with ethyl acetate (80 mL) and 1 N HCl (80 mL). The organic layer was washed with 1 N HCl (2 x 60 mL), water (2 x 60 mL) and brine (60 mL). The ethyl acetate layer was dried and evaporated. The residue was recrystallized from ethyl acetate and hexanes to give N2,N4-bis[4-(cyanomethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (159 mg, 87%) as a white solid. ^{1}H NMR (acetone-d_6): δ 5.09 (s, 2H), 5.16 (s, 2H), 7.08 (d, J= 9.3 Hz, 2H), 7.17 (d, J= 9.0 Hz, 2H), 7.63 (d, J= 9.0 Hz, 2H), 7.77 (d, J= 9.3 Hz, 2H), 8.17 (d, J= 4.8 Hz, 1H), 9.55 (br, 1H, NH), 11.00 (br, 1H, NH); LCMS: 21.47 min.; 96.11%; MS (m/e): 391.20 (MH^+).

7.3.445 N2,N4-Bis[4-(1H-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (R945033)

To a solution of N2,N4-bis[4-(cyanomethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine (100 mg, 0.26 mmol) in DMF (10 mL) was added NH_4Cl (136 mg, 2.54 mmol), sodium azide (100 mg, 1.54 mmol), and one drop of acetic acid and was stirred at 70 °C overnight. Then it was titrated with ethyl acetate (80 mL) to give precipitation. The precipitate was collected by filtration, washed with 1 N HCl and water to give N2,N4-bis[4-(1H-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (66 mg, 54%) as a white solid. ^{1}H NMR (CD_3OD): δ 5.31 (s, 2H), 5.34 (s, 2H), 6.93 (d, J= 9.0 Hz, 2H), 7.00 (d, J= 9.3 Hz, 2H), 7.04 (d, J= 9.0 Hz, 2H), 7.57 (d, J= 9.0 Hz, 2H), 7.81 (d, J= 4.2 Hz, 1H); LCMS: 16.54 min.; purity: 88.34%; MS (m/e): 477.02 (MH^+).

7.3.446 N2,N4-Bis(4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (R945034)

A mixture of 4-Aminobenzoic acid (410 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) in methanol (10 mL) and water (1 mL) was stirred at 100 °C for 24 h to yield N2,N4-bis(4-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine after methanol was removal. This residue was redissolved in DMF (10 mL) and to it was added potassium carbonate (1.65 g, 12 mmol) and iodomethane (0.37 mL, 6 mmol), stirred at room temperature overnight, and then diluted with 1 N HCl (80 mL) and ethyl acetate (80 mL). The ethyl acetate layer was washed with 1N HCl (60 mL) and water (60 mL). The organic layer was separated, dried, evaporated and the resulting residue was recrystallized from ethyl acetate/hexanes to give N2,N4-bis(4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (150 mg, 63%). ^{1}H NMR (acetone-d_6): δ 3.85 (s, 3H), 3.88 (s, 3H), 7.88-7.97 (m, 4H), 7.98-8.05 (m, 4H), 8.18 (d, J= 3.0 Hz, 1H), 9.00 (br, 1H, NH), 9.04 (br, 1H, NH); LCMS: ret. time: 27.07 min.; purity: 95.54%; MS (m/e): 397.04 (MH^+).

7.3.447 N2,N4-Bis(3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (R945035)

In a manner analogous to the preparation of N2,N4-bis(4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 3-aminobenzoic acid (410 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis(3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (180 mg, 76%) as a white solid. ^{1}H NMR (acetone-d_6): δ 3.81 (s, 3H), 3.83 (s, 3H), 7.37 (t, J= 8.1 Hz, 1H), 7.47 (t, J= 8.1 Hz, 1H), 7.60 (d, J= 7.8 Hz, 1H), 7.75 (d, J= 7.5 Hz, 1H), 8.02 (d, J= 6.3 Hz, 1H), 8.10 (d, J= 3.6 Hz, 1H), 8.24 (d, J= 8.4 Hz, 1H), 8.36 (d, J= 11.4 Hz, 2H), 8.74 (br, 1H, NH), 8.82 (br, 1H, NH); LCMS: ret. time: 22.77 min.; purity: 91.04%; MS (m/e): 397.00 (MH^+).

7.3.448 N2,N4-Bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945036)

A solution of N2,N4-bis(3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (100 mg, 0.25 mmol) and NaOH (140 mg, 3.5 mmol) in THF:H_2O (5 mL, each) was stirred at room temperature overnight. The reaction mixture was diluted with water (60 mL) and ethyl acetate (60 mL). The aqueous layer was separated, acidified with 1N HCl solution to pH 3. The formed precipitate was collected by filtration and recrystallized from methanol to give N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-

pyrimidinediamine (54 mg, 58%) as a white solid. ^{1}H NMR (CD_3OD): δ 7.31 (t, J= 8.1 Hz, 1H), 7.42 (t, J= 8.1 Hz, 1H), 7.61 (dm, J= 7.8 Hz, 1H), 7.76 (dm, J= 8.4 Hz, 1H), 7.89 (dm, J= 7.2 Hz, 1H), 7.98 (d, J= 3.6 Hz, 1H), 8.01 (m, 1H), 8.20 (m, 1H), 8.37 (m, 1H); LCMS: ret. time: 15.77 min.; purity: 98.84%; MS (m/e): 369.03 (MH^+).

7.3.449 N2,N4-Bis(4-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945037)

In a manner analogous to the preparation of N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (100 mg, 0.25 mmol) and NaOH (200 mg, 5 mmol) gave N2,N4-bis(4-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine (55 mg, 59%) as a white solid. ^{1}H NMR (CD_3OD): δ 7.77 (d, J= 8.7 Hz, 2H), 7.92 (d, J= 8.7 Hz, 2H), 7.94 (d, J= 8.4 Hz, 2H), 8.02 (d, J= 8.7 Hz, 2H), 8.07 (d, J= 3.6 Hz, 1H); LCMS: ret. time: 16.34 min.; purity: 100%; MS (m/e): 368.87 (MH^+).

7.3.450 N2,N4-Bis(3-isopropylaminocarbonyloxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926412)

The reaction of 1 equivalent of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine with 3 equivalents of isopropyl isocyanate in the presence of pyridine in CH_2Cl_2 at room temperature for 24 h followed by extractive work up using CH_2Cl_2 gave the desired N2,N4-bis(3-isopropylaminocarbonyloxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$ + CD_3OD): δ 7.82 (d, 1H, J= 3.6 Hz), 7.66 (bd, 1H), 7.48 (bd, 1H). 7.15-7.02 (m, 2H), 6.76-6.76 (m, 2H), 6.56 (bd, 1H, J= 8.1 Hz), 6.45 (dd, 1H, J= 1.8 and 8.4 Hz), 4.70 (m, 2H), 1.05 (d, 12H, J= 6.3 Hz); ^{19}F NMR ($CDCl_3$ + CD_3OD): - 47206; LCMS: ret. time: 15.40 min.; purity: 90%.

7.3.451 N2,N4-Bis[4-(ethylaminocarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R945040)

A mixture of 1,4-diaminobenzene (4 g, 37 mmol), ethyl isocyanate (1 mL, 12.6 mmol) and potassium carbonate (8.72 g, 63 mmol) in THF (20 mL) was stirred at room temperature overnight. The reaction mixture was partitioned in 1N HCl solution (80 mL) and ethyl acetate (80 mL). The aqueous layer was extracted with ethyl acetate (4 x 80 mL). The combined organic layers was dried, evaporated, recrystallized from MeOH/CH_2Cl_2/hexanes to give 4-(ethylaminocarbonylamino)aniline (1.4 g, 62%) as a beige solid.

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 4-(ethylaminocarbonylamino)aniline (537 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis[4-(ethylaminocarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (180 mg, 66%) as a white solid. ^{1}H NMR (CD_3OD): δ 1.16 (t, J= 7.2 Hz, 6H), 3.24 (q, J= 7.2 Hz, 4H), 7.29 (d, J= 9.0 Hz, 2H), 7.40 (t, J= 9.0 Hz, 4H), 7.55 (d, J= 9.0 Hz, 2H), 7.87 (s, 1H, NH), 7.89 (s, 1H, NH); LCMS: ret. time: 16.93 min.; purity: 93.43%; MS (m/e): 453.03 (MH^+).

7.3.452 N2,N4-Bis[3-(ethylaminocarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (R945045)

In a manner analogous to the preparation of N2,N4-bis[4-(ethylaminocarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine, the reaction of 1,3-diaminobenzene (2 g, 18.5 mmol), ethyl isocyanate (0.5 mL, 6.3 mmol) and potassium carbonate (4.36 g, 31.5 mmol) gave 3-(ethylaminocarbonylamino)aniline (940 mg, 83%). The reaction of 3-(ethylaminocarbonylamino)aniline (537 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis[3-(ethylaminocarbonylamino)phenyl]-5-fluoro-2,4-pyrimidinediamine (180 mg, 66%) as a white solid. ^{1}H NMR (CD_3OD): δ 1.14 (t, J= 6.9 Hz, 3H), 1.15 (t, J= 7.5 Hz, 3H), 3.21 (q, J= 7.2 Hz, 2H), 3.22 (q, J= 7.5 Hz, 2H), 7.06 (ddd, J= 0.9, 2.1, 7.8 Hz, 1H), 7.10-7.28 (m, 5H), 7.53 (t, J= 2.1 Hz, 1H), 7.80 (m, 1H), 7.92 (d, J= 5.7 Hz, 1H); LCMS: ret. time: 17.17 min.; purity: 89.63%; MS (m/e): 453.38 (MH^+).

7.3.453 N2,N4-Bis(4-hydroxy-3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (R945043)

A solution of N2,N4-bis(3-carboxy-4-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine (70 mg, 0.17 mmol) and thionyl chloride (0.04 mL, 0.55 mmol) in MeOH (10 mL) was refluxed overnight. Methanol was removed *in vacuo*. The residue was diluted with EtOAc (60 mL) and sodium hydrogen carbonate solution (60 mL). The EtOAc layer was washed with $NaHCO_3$ aqueous solution (60 mL) and water (60 mL). The organic layer was dried, evaporated and crystallized from MeOH/Et_2O to give N2,N4-bis(4-hydroxy-3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (58 mg, 77%). ^{1}H NMR (DMSO-d6): δ 3.69 (s, 3H), 3.71 (s, 3H), 6.81 (d, J= 9.3 Hz, 1H), 6.92 (d, J= 9.0 Hz, 1H), 7.64 (dd, J= 2.7, 9.0 Hz, 1H), 7.84 (dd, J= 2.1 and 8.4 Hz, 1 H), 8.03-8.07 (m, 3 H), 9.14 (s, 1 H, NH), 9.34 (s, 1 H, NH), 10.16 (s, 1 H, OH), 10.29 (s, 1H, OH); ^{19}F NMR (282

MHz, DMSO-d6): δ - 165.60; LCMS: ret. time: 22.24 min.; purity: 100%; MS (m/e): 428.98 (MH^+).

7.3.454 N2,N4-Bis[4-(2-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine(R945046)

5-Fluoro-N2,N4-[4-(1-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl],[4-(2-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945047)

N2,N4-Bis[4-(1-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (R945048)

Compound N2,N4-bis[4-(1H-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (30 mg, 0.063 mmol), iodomethane (0.024 mL, 0.38 mmol) and K_2CO_3 (88 mg, 0.64 mmol) in DMF (5 mL) was stirred at room temperature overnight. Then it was diluted with ethyl acetate (50 mL) and water (50 mL). The organic layer was washed with water (50 mL) and brine (50 mL). After separation, the ethyl acetate layer was dried, evaporated and purified by flash column chromatography (EtOAc/hexanes = 2/1, 1/1, EtOAc) to give a mixture of following compounds: N2,N4-bis[4-(2-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine **R945046** (6 mg, 19%), ^1H NMR ($CDCl_3$): δ 4.37 (s, 3H), 4.38 (s, 3H), 5.33 (s, 2H), 5.36 (s, 2H), 6.65 (d, J= 3.0 Hz, 1H), 6.76 (s, 1H), 6.98 (d, J= 9.0 Hz, 2H), 7.04 (d, J= 9.3 Hz, 2H), 7.42 (d, J= 9.0 Hz, 2H), 7.51 (d, J= 9.0 Hz, 2H), 7.90 (br, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 168.52; LCMS: ret. time: 20.44 min.; purity: 94.92%; MS (m/e): 505.02 (MH^+); 5-fluoro-N2,N4-[4-(1-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl],[4-(2-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine **R945047** (8 mg, 25%), ^1H NMR ($CDCl_3$): δ 4.18 (s, 3H), 4.20 (s, 3H), 4.36 (s, 3H), 4.37 (s, 3H), 5.34 (s, 2H), 5.37 (s, 2H), 5.42 (s, 2H), 5.46 (s, 2H), 6.69 (br, 2H), 6.80 (s, 1H), 6.83 (s, 1H), 6.91 (d, J= 9.3 Hz, 2H), 6.98 (d, J= 9.0 Hz, 2H), 6.99 (d, J= 9.3 Hz, 2H), 7.04 (d, J= 9.0 Hz, 2H), 7.41 (d, J= 9.9 Hz, 2H), 7.44 (d, J= 9.3 Hz, 2H), 7.50 (d, J= 9.0 Hz, 2H), 7.54 (d, J= 9.0 Hz, 2H), 7.91 (br, 2H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 168.39, - 168.16; LCMS: ret. time: 19.42 min.; purity: 91.18%; MS (m/e): 504.99 (MH^+), and N2,N4-bis[4-(1-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine **R945048** (6 mg, 19%), ^1H NMR

(CD_3OD + $CDCl_3$): δ 4.20 (s, 3H), 4.22 (s, 3H), 5.50 (s, 2H), 5.55 (s, 2H), 6.95 (d, J= 9.0 Hz, 2H), 7.02 (d, J= 9.3 Hz, 2H), 7.52 (d, J= 9.0 Hz, 2H), 7.66 (d, J= 9.3 Hz, 2H), 7.84 (d, J= 3.6 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD+$CDCl_3$): δ - 163.12; LCMS: ret. time: 18.32 min.; purity: 83.41%; MS (m/e): 504.99 (MH^+).

7.3.455 N4-(4-Aminocarbonylmethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945052)

In like manner to the preparation of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine, 4-(aminocarbonylmethyleneoxy)aniline (398 mg, 2.4 mmol) and 2,4-dichloro-5-fluoropyrimidine (200 mg, 1.2 mmol) gave N4-(4-aminocarbonylmethyleneoxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine (270 mg, 76%). In like manner to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of methyl 4-aminophenoxyacetate (183 mg, 1 mmol) and N4-(4-aminocarbonylmethyleneoxyphenyl)-2-chloro-5-fluoro-4-pyrimidineamine (100 mg, 0.34 mmol) gave N4-(4-aminocarbonylmethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (120 mg, 80%). ^1H NMR (acetone-d_6): δ 3.25 (s, 3H), 3.98 (s, 2H), 4.33 (s, 2H), 6.45 (d, J= 8.7 Hz, 2H), 6.49 (d, J= 9.3 Hz, 2H), 6.93 (d, J= 8.7 Hz, 2H), 7.13 (d, J= 9.0 Hz, 2H), 7.71 (d, J= 5.1 Hz, 1H), 9.46 (br, 1H, NH), 9.78 (br, 1H, NH); LCMS: ret. time: 16.65 min.; purity: 100%; MS (m/e): 442.01 (MH^+).

7.3.456 N4-(4-Cyanomethyleneoxyphenyl])5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945053)

In a manner analogous to the preparation of N2,N4-bis(4-cyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of N4-(4-aminocarbonylmethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethylene oxyphenyl)-2,4-pyrimidinediamine (80 mg, 0.18 mmol), trifluoroacetic anhydride (0.13 mL, 0.92 mmol) and pyridine (0.15 mL, 1.84 mmol) gave N4-(4-cyanomethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (52 mg, 68%) as a white solid. ^1H NMR (DMSO-d6): δ 3.24 (s, 3H), 4.26 (s, 2H), 4.71 (s, 2H), 6.36 (d, J= 9.3 Hz, 2H), 6.59 (d, J= 9.0 Hz, 2H), 7.06 (d, J= 9.0 Hz, 2H), 7.28 (d, J= 9.0 Hz, 2H), 7.58 (d, J= 3.6 Hz, 1H), 8.59 (br, 1H, NH), 8.85 (br, 1H, NH); ^{19}F NMR (282 MHz,

DMSO-d6): δ - 166.26; LCMS: ret. time: 21.37 min.; purity: 100%; MS (m/e): 424.01 (MH^+).

7.3.457 N2,N4-Bis[3-hydroxy-4-(methoxycarbonyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (R945056)

A solution of 4-amino-2-hydroxybenzoic acid (1 g, 6.5 mmol) in MeOH (15 mL) and concentrated sulfonic acid (1 mL) was refluxed overnight. The reaction mixture was quenched with $NaHCO_3$ aqueous solution (60 mL) and EtOAc (60 mL). The organic layer was separated, dried, evaporated to give 3-hydroxy-4-methoxycarbonylaniline.

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, 3-hydroxy-4-methoxycarbonylaniline (500 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis-[3-hydroxy-4-(methoxycarbonyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (105 mg, 41%). ^1H NMR (DMSO-d6): δ 3.90 (s, 3H), 3.93 (s, 3H), 7.31 (dd, J= 2.4, 9.0 Hz, 1H), 7.56 (dd, J= 2.1, 8.7 Hz, 1H), 7.63 (d, J= 2.1 Hz, 1H), 7.67 (d, J= 2.1 Hz, 1H), 7.67 (d, J= 9.0 Hz, 1H), 7.79 (d, J= 9.0 Hz, 1H), 8.28 (d, J= 3.6 Hz, 1H), 9.72 (s, 1H, NH), 9.82 (s, 1H, NH), 10.77 (s, 1H, OH), 10.80 (s, 1H, OH); ^{19}F NMR (282 MHz, DMSO-d6): δ - 161.74; LCMS: ret. time: 31.47 min.; purity: 96.03%; MS (m/e): 428.99 (MH^+).

7.3.458 N2-(4-Aminocarbonylmethyleneoxyphenyl)-5-fluoro-N4-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945060)

In a manner analogous to the preparation of N4-(4-aminocarbonylmethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethylene oxyphenyl)-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-(4-methoxycarbonylmethyleneoxyphenyl)-4-pyrimidineamine (150 mg, 0.48 mmol) and 4-(aminocarbonylmethyleneoxy)aniline (240 mg, 1.44 mmol) gave N2-(4-aminocarbonylmethyleneoxyphenyl)-5-fluoro-N4-(4-methoxycarbonylmethylene oxyphenyl)-2,4-pyrimidinediamine (145 mg, 68%). ^1H NMR (DMSO-d6): δ 3.70 (s, 3H), 4.40 (s, 2H), 4.81 (s, 2H), 6.91 (d, J= 8.4 Hz, 2 H), 6.93 (d, J= 8.4 Hz, 2H), 7.36 (d, J= 8.4 Hz, 2H), 7.54 (d, J= 8.7 Hz, 2H), 8.21 (d, J= 4.8 Hz, 1H), 10.13 (br, 1H, NH), 10.39 (br, 1H, NH); ^{19}F NMR (282 MHz, DMSO-d6): δ - 162.26; LCMS: ret. time: 15.37 min.; purity: 78.49%; MS (m/e): 442.07 (MH^+).

7.3.459 N2,N4-Bis(3-hydroxy-4-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945061)

In a manner analogous to the preparation of N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of N2,N4-bis[3-hydroxy-4-(methoxycarbonyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (70 mg, 0.16 mmol) and NaOH (100 mg, 2.5 mmol) gave N2,N4-bis(3-hydroxy-4-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine (50 mg, 77%) as a white solid. ^{1}H NMR (DMSO-d6): δ 7.21 (dd, J= 1.5 and 8.7 Hz, 1H), 7.46-7.52 (m, 3H), 7.63 (d, J= 8.7 Hz, 1H), 7.72 (d, J= 8.7 Hz, 1H), 8.28 (d, J= 3.3 Hz, 1H), 9.71 (s, 1H, NH), 9.79 (s, 1H, NH), 11.34 (br, 2H); ^{19}F NMR (282 MHz, DMSO-d6): δ - 161.10; LCMS: ret. time: 20.76 min.; purity: 84.65%; MS (m/e): 400.95 (MH^+).

7.3.460 N2-(4-Cyanomethyleneoxyphenyl)-5-fluoro-N4-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (R945062)

In a manner analogous to the preparation of N2,N4-bis(4-cyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N2-(4-aminocarbonylmethyleneoxyphenyl)-5-fluoro-N4-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (100 mg, 0.23 mmol), trifluoroacetic anhydride (0.16 mL, 1.13 mmol) and pyridine (0.18 mL, 2.21 mmol) gave N2-(4-cyanomethyleneoxyphenyl)-5-fluoro-N4-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (66 mg, 69%) as a white solid. ^{1}H NMR (acetone-d_6): δ 3.75 (s, 3H), 4.67 (s, 2H), 4.89 (s, 2H), 6.88 (d, J= 9.0 Hz, 2H), 6.90 (d, J= 9.3 Hz, 2H), 7.48 (d, J= 9.0 Hz, 2H), 7.54 (d, J= 9.0 Hz, 2H), 7.84 (d, J= 4.2 Hz, 1H), 9.17 (br, 1H, NH), 10.59 (br, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 164.65; LCMS: ret. time: 20.69 min.; purity: 94.35%; MS (m/e): 424.02 (MH^+).

7.3.461 N2,N4-Bis(3-methoxy-4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (R945065)

In a manner analogous to the preparation of N2,N4-bis[4-(2-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine, 2-methoxy-4-nitrobenzoic acid (1 g, 5 mmol), potassium carbonate (1.4 g, 10 mmol) and iodomethane (0.47 mL, 7.5 mmol) gave methyl 2-methoxy-4-nitrobenzoate (820 mg, 77%) as a white solid.

The hydrogenation of methyl 2-methoxy-4-nitrobenzoate (700 mg, 3.3 mmol) in methanol (10 mL) catalyzed by 5% Pd-C (100 mg) and Na_2SO_4 (100 mg) at 50 psi for 1h gave methyl 4-amino-2-methoxybenzoate (600 mg, quant.) as a white solid.

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-5-fluoro-2,4-pyrimidinediamine, methyl 4-amino-2-methoxybenzoate (542 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis(3-methoxy-4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (180 mg, 66%) as a white solid. ^{1}H NMR (acetone-d_6): δ 3.76 (s, 3H), 3.77 (s, 3H), 3.81 (s, 6H), 7.36 (dd, J= 1.8, 8.7Hz, 1H), 7.57 (s, 1H), 7.58 (dd, J= 2.1 and 7.2 Hz, 1H), 7.69 (d, J= 2.1 Hz, 1H), 7.73 (d, J= 8.4 Hz, 1H), 7.75 (d, J= 9.0 Hz, 1H), 8.17 (d, J= 3.3 Hz, 1H), 8.89 (s, 2H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 165.18; LCMS: ret. time: 23.17 min.; purity: 100%; MS (m/e): 456.96 (MH^+).

7.3.462 N2,N4-Bis(4-methoxy-3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (R945066)

In a manner analogous to the preparation of N2,N4-bis(3-methoxy-4-methoxycarbonyl)phenyl)-5-fluoro-2,4-pyrimidinediamine, 2-hydroxy-5-nitrobenzoic acid (1 g, 5.5 mmol), potassium carbonate (3 g, 22 mmol) and iodomethane (1 mL, 16 mmol) gave methyl 2-hydroxy-5-nitrobenzoate (880 mg, 77%).

The hydrogenation of methyl 2-hydroxy-5-nitrobenzoate (700 mg, 3.3 mmol) using 10% Pd-C (100 mg) and Na_2SO_4 (100 mg) in MeOH at 50 psi gave methyl 5-amino-2-methoxybenzoate (600 mg).

In a manner analogous to the preparation of N2,N4-bis(3-hydroxyphenyl)-2,4-pyrimidinediamine, methyl 5-amino-2-methoxybenzoate (542 mg, 3 mmol) and 2,4-dichloro-5-fluoropyrimidine (100 mg, 0.6 mmol) gave N2,N4-bis(4-methoxy-3-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (170 mg, 62%) as a pink solid. ^{1}H NMR (acetone-d_6): δ 3.76 (s, 3H), 3.77 (s, 3H), 3.88 (s, 3H), 3.93 (s, 3H), 7.08 (dd, J= 0.8, 9.0 Hz, 1H), 7.18 (d, J= 9.0 Hz, 1H), 7.66 (dd, J= 3.0 and 8.7 Hz, 1H), 7.78 (dd, J= 1.5 and 3.0 Hz, 1H), 7.86 (dt, J= 2.7 and 9.0 Hz, 1H), 7.98 (t, J= 2.7 Hz, 1H), 8.32 (d, J= 5.1 Hz, 1H); ^{19}F NMR (282 MHz, acetone-d_6): δ -163.88; LCMS: ret. time: 19.07 min.; purity: 98.17%; MS (m/e): 456.94 (MH^+).

7.3.463 N2,N4-Bis(3-carboxy-4-methoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945067)

In a manner analogous to the preparation of N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis[4-methoxy-3-(methoxycarbonyl)phenyl]-5-fluoro-2,4-pyrimidinediamine (80 mg, 0.18 mmol) and NaOH (200 mg, 5 mmol) gave N2,N4-bis(3-carboxy-4-methoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (80 mg). ^{1}H NMR (DMSO-d6): δ 3.75 (s, 3H), 3.80 (s, 3H), 6.94 (d, J= 9.6 Hz, 1H), 7.05 (d, J= 9.3 Hz, 1H), 7.78-7.80 (m, 3H), 7.94 (dd, J= 9.3 Hz, 1H), 8.04 (d, J= 3.6 Hz, 1H), 9.10 (s, 1H, NH), 9.30 (s, 1H, NH); ^{19}F NMR (282 MHz, DMSO-d6): δ - 165.56; LCMS: ret. time: 14.65 min.; purity: 100%; MS (m/e): 428.83 (MH^+).

7.3.464 N2,N4-Bis(4-carboxy-3-methoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945068)

In a manner analogous to the preparation of N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N2,N4-bis(3-methoxy-4-methoxycarbonylphenyl)-5-fluoro-2,4-pyrimidinediamine (30 mg, 0.06 mmol) and NaOH (200 mg, 5 mmol) gave N2,N4-bis(4-carboxy-3-methoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (18 mg, 64%) as a white solid. ^{1}H NMR (DMSO-d6): δ 3.66 (s, 3H), 3.73 (s, 3H), 7.37 (d, J= 8.4 Hz, 1H), 7.47 (s, 1H), 7.49 (s, 1H), 7.61-7.71 (m, 3H), 8.25 (d, J= 3.6 Hz, 1H), 9.65 (s, 1H, NH), 9.70 (s, 1H, NH); ^{19}F NMR (282 MHz, DMSO-d6): δ - 162.11; LCMS: ret. time: 17.25 min.; purity: 100%; MS (m/e): 429.04 (MH^+).

7.3.465 N2-(4-Cyanomethyleneoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R945070)

In a manner analogous to the preparation of N2,N4-bis(4-cyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N2-(4-(aminocarbonylmethyleneoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (60 mg, 0.16 mmol), trifluoroacetic anhydride (0.11 mL, 0.8 mmol) and pyridine (0.13 mL, 1.6 mmol) gave N2-(4-cyanomethyleneoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (30 mg, 53%). ^{1}H NMR (acetone-d_6): δ 5.04 (s, 2H), 6.60 (ddd, J= 0.9, 2.4 and 8.1 Hz, 1H), 7.02 (d, J= 9.3 Hz, 2H), 7.15 (t, J= 8.1 Hz, 1H), 7.31 (ddd, J= 1.2, 2.1 and 8.1 Hz, 1H), 7.38 (t, J= 2.1 Hz, 1H), 7.78 (d, J= 9.3 Hz, 2H), 7.98 (d, J= 3.6 Hz, 1H), 8.34 (s, 1H, NH), 8.42 (s, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 168.06; LCMS: ret. time: 18.17 min.; purity: 97.47%; MS (m/e): 352.05 (MH^+).

7.3.466 N4-(4-Cyanomethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945172)

In a manner analogous to the preparation of N2,N4-bis(4-eyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N4-(4-aminocarbonylmethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine, trifluoroacetic anhydride and pyridine in THF gave N4-(4-cyanomethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 4.27 (m, 4H), 4.82 (s, 2H), 6.70 (dd, J= 2.4 and 8.4 Hz, 1H), 6.75 (d, J= 2.4 Hz, 1H), 6.86 (d, J= 8.4 Hz, 1H), 7.02 (d, J= 9.0 Hz, 2H), 7.32 (d, J= 9.0 Hz, 2H), 8.64 (d, J= 1.8 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 135.58; LCMS: ret. time: 19.92 min.; purity: 98.02%; MS (m/e): 393.98 (MH^+).

7.3.467 N2,N4-Bis[4-[2-methoxyimino(amino)ethyleneoxy]phenyl]-5-fluoro-2,4-pyrimidinediamine (R945096)

N2,N4-Bis(4-cyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (50 mg, 0.13 mmol), methoxyamine HCl salt (54 mg, 0.65 mmol) and sodium bicarbonate (54 mg, 0.65 mmol) were dissolved in methanol (5 mL). The reaction solution was stirred at 70 °C for 7 days. Then methanol was removed under reduced pressure. The residue was partitioned in EtOAc (60 ml) and water (60 mL). The ethyl acetate layer was washed with water (2 x 60 mL), dried, evaporated and purified by flash column chromatography (EtOAc/hexanes; 1:1; EtOAc) to give N2,N4-bis[4-[2-methoxyimino(amino)ethyleneoxy]phenyl]-5-fluoro-2,4-pyrimidinediamine (30 mg, 48%). ^{1}H NMR (acetone-d_6): δ 3.70 (s, 3H), 3.71 (s, 3H), 4.44 (s, 2H), 4.49 (s, 2H), 5.43 (br, 2H), 5.47 (br, 2H), 6.93 (d, J= 9.0 Hz, 2H), 7.00 (d, J= 9.0 Hz, 2H), 7.62 (d, J= 9.0 Hz, 2H), 7.71 (d, J= 9.0 Hz, 2H), 7.93 (d, J= 3.6 Hz, 1H), 8.26 (br, 1H, NH), 8.40 (br, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 169.08; LCMS: ret. time: 14.41 min.; purity: 100%; MS (m/e): 484.97 (MH^+).

7.3.468 N2-(4-Carboxymethyleneoxyphenyl)-N4-(4-cyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R945097)

In a manner analogous to the preparation of N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine, N4-(4-cyanomethyleneoxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (10 mg, 0.024 mmol) and

LiOH (2 mg, 0.048 mmol) gave N2-(4-carboxymethyleneoxyphenyl)-N4-(4-cyanomethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (5 mg, 52%) as a white solid. ^{1}H NMR (CD_3OD): δ 4.60 (s, 2H), 4.99 (s, 2H), 6.88 (d, J= 9.0 Hz, 2H), 7.02 (d, J= 9.0 Hz, 2H), 7.39 (d, J= 8.7 Hz, 2H), 7.65 (d, J= 9.0 Hz, 2H), 7.84 (d, J= 3.9 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ - 168.81; LCMS: ret. time: 17.95 min.; purity: 86.04%; MS (m/e): 409.99 (MH^+).

7.3.469 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945127)

A mixture of 3-nitrophenol (4 g, 29 mmol), bromoacetonitrile (2.5 mL, 36 mmol) and K_2CO_3 (8 g, 58 mmol) in acetone (20 mL) was stirred at room temperature overnight. The reaction mixture was diluted with water (80 mL) and acetone was removed under reduced pressure. The light-yellow precipitate was collected by filtration, washed with water and dried to give 1-cyanomethyleneoxy-3-nitrobenzene.

1-Cyanomethyleneoxy-3-nitrobenzene (2 g, 11 mmol) was dissolved in methanol (20 mL) and to the solution was added hydroxyamine HCl salt (1 g, 14 mmol) and triethylamine (3 mL, 22 mmol). The reaction mixture was refluxed for 2 h and the solvent was removed under reduced pressure. The residue was redissolved in THF (30 mL). To the solution was added acetyl chloride (4 mL, 56 mmol) and pyridine (9 mL, 0.11 mol). The reaction mixture was stirred at room temperature overnight, then added THF (10 mL), water (10 mL) and NaOH (3 g, 75 mmol). The reaction solution was refluxed overnight, diluted with water (80 mL). The aqueous solution was extracted with EtOAc (3 x 60 mL). After separation, the combined EtOAc layers was dried, evaporated to give 1-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxy-3-nitrobenzene.

1-(5-Methyl-1,2,4-oxadiazol-3-yl)methyleneoxy-3-nitrobenzene was dissolved in THF (10 mL) and water (10 mL) and to it were added sodium bisulfite (1 g, 5.7 mmol) and sodium bicarbonate (1 g, 12 mmol). The resulting mixture was stirred at room temperature for 30 min, then diluted with EtOAc (80 mL) and water (80 mL). The aqueous solution was extracted with EtOAc (80 mL). The organic layers were combined, dried, evaporated to give 3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyaniline (500 mg, 22% in four steps).

The reaction of 2-chloro-5-fluoro-N4-(3-hydroxyphenyl)-4-pyrimidineamine (40 mg, 0.17 mmol) and 3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyaniline (102 mg, 0.50 mmol) gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-

yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (35mg, 51%). ^{1}H NMR ($CDCl_3$): δ 2.61 (s, 3H), 5.09 (s, 2H), 6.58-6.62 (m, 2H), 6.76 (dt, J= 1.2, 8.1 Hz, 1H), 6.84 (dt, J= 1.2 and 7.8 Hz, 1H), 6.92 (d, J= 3.0 Hz, 1H), 7.139 (t, J= 8.1 Hz, 1H), 7.145 (t, J= 8.1 Hz, 1H), 7.25 (m, 1H), 7.54 (dt, J= 2.1, 8.7 Hz, 2H), 7.88 (d, J= 3.3 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): -166.52; LCMS: ret. time: 19.33 min.; purity: 84.80%; MS (m/e): 409.35 (MH^+).

7.3.470 5-Fluoro-N2-(3-hydroxyphenyl)-N4-[3-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945130)

1-Methoxycarbonylmethyleneoxy-3-nitrobenzene (2 g, 9.5 mmol) was dissolved in THF (10 mL) and water (10 mL). To the solution was added NaOH (1 g, 25 mmol). The reaction mixture was stirred at room temperature overnight. The solution was diluted with water (60 mL) and EtOAc (60 mL). After extraction, the aqueous layer was separated, acidified with 1N HCl to pH 3. The formed white precipitate was collected by filtration, washed with water, dried to give 1-carboxymethyleneoxy-3-nitrobenzene.

Acetonitrile (2.25 mL, 43 mmol) was dissolved in methanol (10 mL) and to the solution was added hydroxyamine HCl salt (2 g, 29 mmol) and triethylamine (8 mL, 57 mmol). The reaction mixture was refluxed for 2 days and the solvent was removed under reduced pressure to give acetamide oxime as white solid.

Acetamide oxime (0.75 g, 10 mmol), 1-carboxymethyleneoxy-3-nitrobenzene (1 g, 5 mmol), EDC HCl (1.45 g, 7.5 mmol) and diisopropylethylamine (2.65 mL, 15 mmol) were dissolved in THF (15 mL) and refluxed for 4h. The reaction mixture was diluted with EtOAc (60 mL) and water (60 mL). The EtOAc layer was washed with sodium bicarbonate aqueous solution (2 x 60 mL), 1N HCl (2 x 60 mL) and water (60 mL). After separation, the EtOAc layer was dried, evaporated to give 1-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxy-3-nitrobenzene.

Sodium bisulfite (1.5 g, 8.6 mmol), sodium bicarbonate (1.5 g, 18 mmol) and 1-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxy-3-nitrobenzene (1 g, 4 mmol) were dissolved in THF (15 mL) and water (15 mL). It was stirred at room temperature for 20 min, diluted with EtOAc (60 mL) and water (60 mL). The aqueous solution was extracted with EtOAc (2 x 60 mL). The organic layers were combined, dried, evaporated to give 3-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyaniline.

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of 3-(3-methyl-1,2,4-oxadiazol-

5-yl)methyleneoxyaniline (369 mg, 1.8 mmol) and 2,4-dichloro-5-fluoropyrimidine (150 mg, 0.9 mmol) gave 2-chloro-5-fluoro-N4-[3-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine. The reaction of 2-chloro-5-fluoro-N4-[3-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-4-pyrimidineamine (20 mg, 0.06 mmol) and 3-hydroxyaniline (20 mg, 0.18 mmol) gave 5-fluoro-N2-(3-hydroxyphenyl)-N4-[3-(3-methyl-1,2,4-oxadiazol-5-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (10 mg, 42%). ^{1}H NMR ($CDCl_3$): δ 2.42 (s, 3H), 5.28 (s, 2H), 6.49 (ddd, J= 0.9, 2.7 and 8.4 Hz, 1H), 6.73 (ddd, J= 0.9, 2.7 and 8.4 Hz, 1H), 6.81-6.84 (m, 2H), 6.88 (ddd, J= 0.6, 2.1 and 8.1 Hz, 1H), 7.13 (t, J= 8.1 Hz, 1H), 7.26 (t, J= 8.1 Hz, 1H), 7.40 (br, 1H), 7.49 (t, J= 2.1 Hz, 1H), 7.94-7.97 (m, 2H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.11; LCMS: ret. time: 18.80 min.; purity: 92.01%; MS (m/e): 409.01 (MH^+).

7.3.471 5-Fluoro-N4-(2-methoxycarbonylbenzofuran-5-yl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945131)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-hydroxyphenyl)-2,4-pyrimidinediamine, the reaction of N4-(2-carboxybenzofuran-5-yl)-2-chloro-5-fluoro-4-pyrimidineamine (50 mg, 0.16 mmol) and 3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyaniline (100 mg, 0.49 mmol) gave N4-(2-carboxybenzofuran-5-yl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine.

In a manner analogous to the preparation of N2,N4-bis[4-(2-methyl-1,2,3,4-tetrazol-5-yl)methyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine, the reaction of N4-(2-carboxybenzofuran-5-yl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine, potassium carbonate (100 mg, 0.7 mmol) and iodomethane (0.03 mL, 0.5 mmol) gave 5-fluoro-N4-(2-methoxycarbonylbenzofuran-5-yl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (40 mg, 50%). ^{1}H NMR (acetone-d_6): δ 2.63 (s, 3H), 3.94 (s, 3H), 5.04 (s, 2H), 6.65 (ddd, J= 0.9, 2.4 and 7.8 Hz, 1H), 7.16 (t, J= 7.8 Hz, 1H), 7.24 (ddd, J= 1.2, 1.8 and 8.1 Hz, 1H), 7.58 (d, J= 1.2 Hz, 1H), 7.64 (d, J= 9.3 Hz, 1H), 7.67 (t, J= 2.1 Hz, 1H), 7.88 (dd, J= 2.1 and 9.0 Hz, 1H), 8.04 (d, J= 3.6 Hz, 1H), 8.26 (d, J= 1.8 Hz, 1H), 8.47 (br, 1H, NH), 8.71 (br, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 167.73; LCMS: ret. time: 22.55 min.; purity: 85.43%; MS (m/e): 490.97 (MH^+).

7.3.472 N4-(2-Carboxybenzofuran-5-yl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945134)

In a manner analogous to the preparation of N2,N4-bis(3-carboxyphenyl)-5-fluoro-2,4-pyrimidinediamine, the reaction of 5-fluoro-N4-(2-methoxycarbonylbenzofuran-5-yl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (20 mg, 0.04 mmol) and NaOH (10 mg, 0.25 mmol) gave N4-(2-carboxybenzofuran-5-yl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (acetone-d_6): δ 2.63 (s, 3H), 5.04 (s, 2H), 6.64 (d, J= 8.1 Hz, 1H), 7.17 (t, J= 8.1 Hz, 1H), 7.26 (d, J= 7.8 Hz, 1H), 7.56 (s, 1H), 7.62 (d, J= 9.3 Hz, 1H), 7.67 (t, 1H), 7.86 (dd, J= 1.8 and 9.0 Hz, 1H), 8.04 (d, J= 3.3 Hz, 1H), 8.26 (d, 1H), 8.48 (br, 1H, NH), 8.71 (br, 1H, NH); LCMS: ret. time: 18.00 min.; purity: 75.13%; MS (m/e): 476.70 (MH^+).

7.3.473 N4-(2-Aminocarbonylbenzofuran-5-yl)-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (R945135)

A mixture of 5-fluoro-N4-(2-methoxycarbonylbenzofuran-5-yl)-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine (20 mg, 0.04 mmol) and concentrated NH_4OH (5 mL) in methanol (5 mL) was stirred at room temperature overnight. The solvent was evaporated to give N4-[2-(aminocarbonyl)benzofuran-5-yl]-5-fluoro-N2-[3-(5-methyl-1,2,4-oxadiazol-3-yl)methyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (acetone-d_6): δ 2.61 (s, 3H), 5.04 (s, 2H), 6.64 (ddd, J= 0.9, 2.4 and 8.1 Hz, 1H), 7.16 (t, J= 8.1 Hz, 1H), 7.27 (ddd, J= 0.9, 1.8 and 8.4 Hz, 1H), 7.44 (d, J= 0.6 Hz, 1H), 7.55 (dd, J= 0.6 and 8.1 Hz, 1H), 7.64 (t, J= 2.4 Hz, 1H), 7.79 (dd, J= 2.4 and 9.0 Hz, 1H), 8.03 (d, J= 3.6 Hz, 1H), 8.24 (d, J= 2.4 Hz, 1H), 8.48 (br, 1H, NH), 8.68 (br, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 167.80; LCMS: ret. time: 17.43 min.; purity: 100%; MS (m/e): 475.62 (MH^+).

7.3.474 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[4-(2-methoxyimino(amino)ethyleneoxy)phenyl]-2,4-pyrimidinediamine (R945167)

In a manner analogous to the preparation of N2,N4-bis[4-(2-methoxyimino(amino)ethyleneoxy)phenyl]-5-fluoro-2,4-pyrimidinediamine, the reaction of N2-(4-cyanomethyleneoxyphenyl)-5-fluoro-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (50 mg, 0.14 mmol), methoxyamine HCl salt (0.71 mmol) and triethylamine (0.2 mL, 1.4

mmol) gave 5-fluoro-N4-(3-hydroxyphenyl)-N2-[4-(2-methoxyimino(amino)ethyleneoxy)phenyl]-2,4-pyrimidinediamine (40 mg, 70%). ^{1}H NMR ($CDCl_3$): δ 3.82 (s, 3H), 4.50 (s, 2H), 4.87 (br, 2H, NH), 6.60 (ddd, J= 0.9, 2.4 and 8.1 Hz, 1H), 6.79-6.84 (m, 2H), 6.86 (d, J= 8.7 Hz, 2H), 7.00 (s, 1H), 7.14 (t, J= 8.1 Hz, 1H), 7.34 (d, J= 9.0 Hz, 2H), 7.47 (t, J= 2.1 Hz, 1H), 7.87 (d, J= 3.3 Hz, 1H); ^{19}F NMR (282 MHz, $CDCl_3$): δ - 167.67; LCMS: ret. time: 13.69 min.; purity: 92.51%; MS (m/e): 399.01 (MH^+).

7.3.475 N2-(3,4-Ethylenedioxyphenyl)-5-fluoro-N4-[4-methoxyimino(amino)ethyleneoxyphenyl]-2,4-pyrimidinediamine (R945175)

In a manner analogous to the preparation of N2,N4-bis[4-(2-methoxyimino(amino)ethyleneoxyphenyl)]-5-fluoro-2,4-pyrimidinediamine, N4-(4-cyanomethyleneoxyphenyl)-N2-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine, methoxyamine hydrochloride salt and triethylamine gave N2-(3,4-ethylenedioxyphenyl)-5-fluoro-N4-[4-methoxyimino(amino)ethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (acetone-d_6): δ 3.70 (s, 3H), 4.21-4.28 (m, 4H), 4.48 (s, 2H), 5.46 (br, 2H), 6.71 (d, J= 8.7 Hz, 1H), 6.99 (d, J= 9.0 Hz, 2H), 7.06 (dd, J= 2.4 and 8.7 Hz, 1H), 7.42 (d, J= 2.4 Hz, 1H), 7.72 (d, J= 9.3 Hz, 2H), 7.93 (d, J= 3.3 Hz, 1H), 8.22 (br, 1H, NH), 8.40 (br, 1H, NH); ^{19}F NMR (282 MHz, acetone-d_6): δ - 169.05; LCMS: ret. time: 16.49 min.; purity: 96.47%; MS (m/e): 440.96 (MH^+).

7.3.476 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926495)

A mixture of N2-(3-ethoxy/or methoxycarbonylmethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-2,4-pyrimidinediamine (19.8g, 45 mmol), methylamine hydrochloride (30.63g, 450 mmol) and diisopropylethylamine (78.07 mL, 450 mmol) in MeOH (450 mL) was stirred in a pressure bottle at 100 °C for 8h (followed by TLC). The reaction was cooled to room temperature, diluted with H_2O (6 lit), the solid obtained was filtered, washed with H_2O and dried to obtain 18 g of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylaminocarbonylmethyleneoxyphenyl)]-2,4-pyrimidinediamine. Alternatively, the reaction of equimolar amount of 2-chloro-N4-(3,4-ethylenedioxyphenyl)-5-fluoro-4-aminopyridine with 3-(N-methylamino)carbonylmethyleneoxyaniline in MeOH in a pressure tube at 110 °C for 24h and or in EtOH using microwave at 175 °C for 10-20

min followed by aqueous work up gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.90 (s, 1H), 7.89 (bs, 1H), 7.38 (d, 1H, J= 2.4 Hz), 7.28 (d, 1H, J= 2.4 Hz), 7.17-7.09 (m, 2H), 6.79 (d, 1H, J= 9 Hz), 6.57 (m, 1H), 4.38 (s, 2H), 4.24 (s, 4H), 2.81 (s, 3H); LCMS: ret. time: 18.20 min.; purity: 98%; MS (m/e): 426 (MH^+).

7.3.477 N4-(1,4-Benzoxazin-6-yl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl] -2,4-pyrimidinediamine (R921219)

In like manner to N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-(3-ethoxyocarbonylmethyleneoxyphenyl)-5-fluoro-pyrimidinediamine and methylamine hydrochloride were reacted to yield N4-(1,4-benzoxazin-6-yl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.8 (d, 1H), 7.4 (m, 1H), 7.05 (m, 2H), 7.0 (s, 1H), 6.8 (dd, 1H), 6.66 (d, 1H), 6.56 (dd, 1H), 4.35 (s, 2H), 4.18 (m, 2H), 3.25 (m, 2H), 2.8 (s, 3H); LCMS: ret time: 18.0 min. purity: 97 %; MS (m/e): 425 (MH^+).

7.3.478 N4-(3,4-Ethylendioxyphenyl)-5-fluoro-N2-[4-(N-2-hydroxyethylamino)carbonylmethylencoxyphenyl]-2,4-pyrimidinediamine (R909239)

In like manner to N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-(4-ethoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and 2-hydroxyethylamine were reacted to yield N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[4-(N-2-hydroxyethylamino) carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (D_2O): δ 8.02 (d, 1H, J= 4 Hz), 7.40 (m, 2H), 7.28 (m, 1H), 7.05 (m, 5H), 4.83 (s, 2H), 4.5 (m, 2H), 4.23 (m, 2H), 4.03(m, 2H), 3.87 (m, 2H); LCMS: ret. time: 17.17 min.; purity: 94%; MS (m/e): 456 (MH^+).

7.3.479 N4-(3,4-Ethylendioxyphenyl)-5-fluoro-[4-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R909240)

In like manner to N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-N4-(3,4-

ethylenedioxyphenyl)-5-fluoro-4-pyrimidineamine and 4-(N-methylamino)carbonylmethyleneoxyaniline were reacted to yield N4-(3,4-ethylendioxyphenyl)-5-fluoro-[4-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (D_2O): δ 8.02 (d, 1H, J= 4 Hz), 7.40 (m, 2H), 7.28 (m, 1H), 7.05 (m, 5H), 4.83 (s, 2H), 4.5 (m, 2H), 4.23 (m, 2H), 3.87 (s, 3H); LCMS: ret. time: 18.43 min.; purity: 94%; MS (m/e): 426 (MH^+).

7.3.480 N4-(1,4-Benzoxazin-6-yl)-5-fluoro-N2-[3-(N-2-hydroxypropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R909251)

In like manner to N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-(3-ethoxyocarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine and 2-hydroxypropylamine were reacted to yield N4-(1,4-benzoxazin-6-yl)-5-fluoro-N2-[3-(N-2-hydroxypropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ□□□(d, 1H, J= 4 Hz), 7.25 (m, 2H), 7.04 (m, 1H), 6.82 (m, 2H), 6.58 (m, 1H), 6.45 (m, 1H) 4.36 (s, 2H), 4.02 (m, 2H), 3.75 (m, 1H), 3.31 (m, 2H), 3.00 (m, 2H), 1.00 (m, 3H); LCMS: ret. time: 17.33 min.; purity: 97 %; MS(m/e): 469 (MH^+).

7.3.481 N4-(1,4-Benzoxazin-6-yl)-5-fluoro-N2-[3-(N-3-hydroxypropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R909252)

In like manner to N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-6-yl)-N2-[3-ethoxyocarbonylmethyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine and 3-hydroxypropylamine were reacted to yield N4-(1,4-benzoxazin-6-yl)-5-fluoro-N2-[3-(N-3-hydroxypropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ □□□ (d, 1H, J= 4 Hz), 7.39 (m, 2H), 7.04 (m, 1H), 6.87 (m, 2H), 6.55 (m, 1H), 6.41 (m, 1H), 4.29 (s, 2H), 4.02 (m, 2H), 3.35 (m, 2H), 3.31 (m, 2H), 3.09 (m, 2H), 1.50 (m, 3H); LCMS: ret. time: 17.11 min.; purity: 94 %; MS (m/e): 469 (MH^+).

7.3.482 N4-(1,4-Benzoxazin-6-yl)-N2-[3-(N-isopropylamino)carbonylmethyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (R909254)

In like manner to N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(1,4-benzoxazin-

6-yl)]-N2-(3-ethoxyocarbonylmethyleneoxyphenyl)-5-fluoro-pyrimidinediamine and isopropylamine were reacted to yield N4-(1,4-benzoxazin-6-yl)-5-fluoro-N2-[3-(N-isopropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ□□□(d, 1H, J= 4 Hz), 7.25 (m, 1H), 7.14 (m, 1H), 7.02 (m, 1H), 6.85 (m, 3H), 6.63 (m, 1H), 4.39 (s, 2H), 4.12 (m, 2H), 4.05 (m, 1H), 3.38 (m, 2H), 1.20 (m, 6H); LCMS: ret. time: 20.83 min.; purity: 96 %; MS (m/e): 453 (MH^+).

7.3.483 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-[2-(N-pyrrolidino)carbonylbenzofuran-5-yl]-2,4-pyrimidinediamine (R926703)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine and pyrrolidine were reacted to yield 5-fluoro-N4-(4-isopropoxyphenyl)-N2-[2-(N-pyrrolidino)carbonylbenzofuran-5-yl]-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.83 (s, 1H), 7.79 (d, 1H, J= 5.4 Hz), 7.42 (bs, 1H), 7.39 (d, 2H, J= 8.7 Hz), 7.28-7.24 (m, 2H), 6.81 (d, 2H, J= 8.7 Hz), 4.52 (2q, 1H, J= 6.0 Hz), 3.92 (t, 2H, J= 6.9 Hz), 3.67 (t, 2H, J= 6.9 Hz), 2.05-1.90 (m, 4H), 1.32 (d, 6H, J= 6.6 Hz); ^{19}F NMR ($CDCl_3$): - 24000; LCMS: ret. time: 23.49 min.; purity: 97 %; MS (m/e): 476 (MH^+).

7.3.484 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[4-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926708)

In a manner similar to the preparation of N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to yield N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[4-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.10 (bs, 1H), 9.88 (bs, 1H), 8.15 (t, 1H, J= 4.5 Hz), 8.05 (bs, 1H), 7.40 (d, 2H, J= 8.7 Hz), 7.23 (d, 1H, J= 2.1 Hz), 7.11 (dd, 1H, J= 2.4 and 8.7 Hz), 6.89 (d, 2H, J= 8.7 Hz), 6.81 (d, 1H, J= 8.7 Hz), 4.42 (s, 2H), 4.23 (s, 4H), 2.64 (d, 3H, J= 4.5 Hz); LCMS: ret. time: 17.60 min.; purity: 96 %; MS (m/e): 426 (MH^+).

7.3.485 N4-(4-tert-Butylphenyl)-5-fluoro-N2-[2-(N-methylamino)carbonylbenzofuran-5-yl]-2,4-pyrimidinediamine (R926494)

In like manner to the preparation of N4-(ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of N4-(4-tert-butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine with methylamine hydrochloride gave N4-(4-tert-butylphenyl)-5-fluoro-N2-[2-(N-methylamino)carbonylbenzofuran-5-yl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.04 (d, 1H, J= 2.4 Hz), 7.88 (d, 1H, 4.2 Hz), 7.58-7.30 (m, 7H), 2.94 (s, 3H), 1.33 (s, 9H); LCMS: ret. time: 22.86 min.; purity: 94%; MS (m/e): 434 (MH^+).

7.3.486 N4-(4-*tert*-Butylphenyl)-5-fluoro-N2-[4-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926712)

In a manner similar to the preparation of N4-(3,4-ethylendioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-[4-(*tert*-butyl)phenyl]-5-fluoro-N2-(4-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to yield N4-(4-*tert*-butylphenyl)-5-fluoro-N2-[4-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.92 (d, 1H, J= 5.4 Hz), 7.53 (d, 2H, J= 8.7 Hz), 7.40 (d, 2H, J= 8.7 Hz), 7.34 (d, 2H, J= 8.7 Hz), 7.03 (d, 2H, J= 8.7 Hz), 4.52 (s, 2H), 2.82 (s, 3H), 1.35 (s, 9H); ^{19}F NMR (CD_3OD): - 46174; LCMS: ret. time: 23.34 min.; purity: 94 %; MS (m/e): 424 (MH^+).

7.3.487 N4-(3-*tert*-Buthylpheny)-5-fluoro-N2-[3-(N-2-hydroxyethylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine R940295

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3-*tert*-butylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and 2-hydroxyethylamine were reacted to give N4-(3-tert-butylpheny)-5-fluoro-N2-[3-(N-2-hydroxyethylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 21.34 min.; purity: 97 %; MS (m/e): 453 (M^+); 454 (MH^+); ^{1}H NMR ($CDCl_3$): δ 10.34 (1H, s), 7.76 (1H, m), 7.52 (1H, m), 7.4-7.1 (5H, m), 6.98 (1H, m), 6.7 (1H, m), 4.36 (2H, s), 3.77 (2H, t, J 5 Hz), 3.51 (2H, m), 1.27 (9H, s).

7.3.488 N2,N4-Bis[4-(N-pyrrolidino)carbonylmethyleneoxyphenyl]-5-ethoxycarbonyl-2,4-pyrimidinediamine (R926562)

In like manner of the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of N2,N4-bis(4-ethoxycarbonylmethyleneoxyphenyl)-5-ethoxycarbonyl-2,4-pyrimidinediamine with pyrrolidine gave N2,N4-bis[4-(N-pyrrolidino)carbonylmethyleneoxyphenyl]-5-ethoxycarbonyl-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.17 (s, 1H), 8.73 (bs, 1H), 7.50(bd, 2H, J= 9.0 Hz), 7.43 (d, 2H, J= 2.4 and 6.9 Hz), 6.91 (m, 4H), 4.64 (s, 2H), 4.62 (s, 2H), 4.34 (q, 2H, J= 7.2 Hz), 3.53 (m, 8H), 1.95 (m, 4H), 1.86 (m, 4H), 1.38 (t, 3H, J= 6.9 Hz); LCMS: ret. time: 22.54 min.; purity: 100%; MS (m/e): 590 (MH^+).

7.3.489 N2,N4-Bis(4-N-pyrrolidinocarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine (R926563)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of N2,N4-bis(4-methoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyrimidinediamine with pyrrolidine gave N2,N4-bis[4-(N-pyrrolidino)carbonylmethyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 7.90 (s, 1H), 7.50 (bd, 2H, J= 7.8 Hz), 7.41 (bd, 2H, J= 7.2 Hz), 6.93 (m, 4H), 6.73 (s, 1H), 6.64 (s, 1H), 4.65 (s, 1H), 4.65 (s, 1H), 3.54 (m, 8H), 1.96 (m, 4H), 1.87 (m, 4H).

7.3.490 N4-(3-*tert*-Butylpheny)-N2-[3-(N-1,3-dihydroxypropyl-2-amino)carbonylmethyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine (R940296)

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3-*tert*-butylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine and 2-amino-1,3-propanediol were reacted to give N4-(3-*tert*-butylpheny)-N2-[-3-(1,3-dihydroxypropyl-2-amino)carbonylmethyleneoxyphenyl]-5-fluoro-2,4-pyrimidinediamine. LCMS: ret. time: 20.26 min.; purity: 97.67 %; MS (m/e): 484 (M^+); 485 (MH^+); 1H NMR (DMSO-d6): δ 9.75 (1H, s), 9.57 (1H, s), 8.25 (1H, m), 7.92 (1H, m), 7.62 (2H, m), 7.37 (3H, m), 7.23 (1H, m), 6.66 (1H, m), 4.46 (2H, s), 3.87 (1H, m), 3.55 (4H, m), 1.36 (9H, s).

7.3.491 N2-[3-(N-2,3-Dihydroxypropylamino) carbonylmethyleneoxyphenyl]-5-fluoro-N4-(3-isopropylphenyl)-2,4-pyrimidinediamine R940290

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N4-(3-isopropylphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and 3-amino-1,2-propanediol were reacted to give N2-[3-(N-2,3-dihydroxypropylamino)carbonylmethyleneoxyphenyl)-5-fluoro-N4-(3-isopropylphenyl)-2,4-pyrimidinediamine. LCMS: ret. time: 20.04 min.; purity: 98 %; MS (m/e): 470 (MH^+); ^1H NMR (DMSO-d6): δ 9.54 (1H, s), 9.41 (1H, s), 8.22 (1H, m), 7.95 (1H, m), 7.85 (1H, d, J= 10 Hz), 7.58 (1H, s), 7.43-7.32 (3H, m), 7.25 (1H, t, J= 7.75 Hz), 7.06 (1H, d, J= 7.75 Hz), 6.64 (1H, d, J= 10 Hz), 4.47 (2H, s), 3.38 (4H, m), 3.16 (1H, m), 2.96 (1H, m), 1.28 (6H, d, J=6.9 Hz).

7.3.492 5-Fluoro-N4-(3-isopropylphenyl)-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine R940288

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N4-(3-isopropylphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to give 5-fluoro-N4-(3-isopropylphenyl)-N2-[3-(N-methylamino)carbonylmethyleneoxy)phenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 23.43 min.; purity: 99 %; MS (m/e): 409 (M^+), 411 (MH^+); ^1H NMR (DMSO-d6): δ 9.90 (1H, s), 9.74 (1H, s), 8.28 (1H, d, J= 4.8 Hz), 8.06 (1H, m), 7.78 (1H, d, J= 7.2 Hz), 7.58 (1H, s), 7.4-7.3 (3H, m), 7.24 (1H, t, J= 8.4 Hz), 7.00 (1H, d, J= 7.25 Hz), 6.70 (1H, d, J= 7.25 Hz), 4.44 (2H, s), 2.93 (1H, sept, J= 6.9 Hz), 2.74 (3H, d, J= 4.8 Hz), 1.27 (6H, d, J= 6.9 Hz).

7.3.493 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[2-(N-dimethylamino)carbonylbenzofuran-5-yl]-2,4-pyrimidinediamine (R926718)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N4-(3-hydroxyphenyl)-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine and dimethylamine were reacted to yield 5-fluoro-N4-(3-hydroxyphenyl)-N2-[2-(N-

dimethylamino)carbonylbenzofuran-5-yl)-2,4-pyrimidinediamine. ^{1}H NMR ($CDCl_3$): δ 8.06 (d, 1H, J= 2.1 Hz), 7.91 (d, 1H, J= 3.6 Hz), 7.57 (t, 1H, J= 2.4 Hz), 7.37 (d, 1H, J= 9.0 Hz), 7.28 (s, 1H), 7.19 (t, 1H, J= 7.8), 7.06 (s, 1H), 6.82-6.76 (m, 2H), 6.71 (dd, 1H, J= 2.4 and 7.8 Hz), 3.31 (s, 3H), 3.09 (s, 3H); ^{19}F NMR ($CDCl_3$): - 47292; LCMS: ret. time: 17.29 min.; purity: 92 %; MS (m/e): 408 (MH^+).

7.3.494 N4-(3-Chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-[3-(N-piperazino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R945149)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of N4-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine (700 mg, 1.6 mmol) and piperazine (4 g, 46 mmol) gave N4-(3-chloro-4-hydroxy-5-methylphenyl)-5-fluoro-N2-[3-(N-piperazino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (520 mg, 66%). ^{1}H NMR (CD_3OD): δ δ 2.22 (s, 3H), 2.75 (t, J= 5.4 Hz, 4H), 3.40 (t, J= 4.8 Hz, 2H), 3.54 (t, J= 5.1 Hz, 2H), 4.62 (s, 2H), 6.57 (ddd, J= 1.5, 2.7 and 7.5 Hz, 1H), 7.09 (dt, J= 1.5 and 8.1 Hz, 1H), 7.14 (t, J= 7.8 Hz, 1H), 7.28 (t, J= 2.1 Hz, 1H), 7.31 (dd, J= 0.9 and 2.7 Hz, 1H), 7.50 (d, J= 2.7 Hz, 1H), 7.88 (d, J= 3.9 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ - 168.63; LCMS: ret. time: 14.99 min.; 93.88%; MS (m/e): 486.96 (MH^+).

7.3.495 N4-(4-*tert*-Butylphenyl)-5-fluoro-N2-[2-(N-methylamino)carbonylbenzofuran-5-yl]- 2,4-pyrimidinediamine (R926713)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(4-*tert*-butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to yield N4-(4-*tert*-butylphenyl)-5-fluoro-N2-[2-(N-methylaminocarbonylbenzofuran-5-yl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 8.05 (d, 1H, J= 2.4 Hz), 7.88 (d, 1H, J= 4.2 Hz), 7.57 (d, 2H, J= 8.7 Hz), 7.51-7.41 (m, 2H), 7.34-7.31 (m, 3H), 2.94 (s, 3H), 1.33 (s, 9H); ^{19}F NMR (CD_3OD): - 47682; LCMS: ret. time: 23.02 min.; purity: 90 %; MS (m/e): 434 (MH^+).

7.3.496 N4-(3,5-Dimethoxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926796)

In like manner to the preparation of N4-(ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of N4-(3,5-dimethoxyphenyl)-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-5-fluoro-2,4-pyridinediamine with methylamine hydrochloride gave N4-(3,5-dimethoxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.92 (d, 1H, J= 4.2 Hz), 7.42 (t, 1H, J= 1.8 Hz), 7.12 (m, 2H), 6.91 (d, 1H, J= 2.4 Hz), 6.59 (m, 1H), 6.22 (t, 1H, J= 1.8 Hz), 4.35 (s, 2H), 3.69 (s, 6H), 2.81 (s, 3H); LCMS: ret. time: 18.35 min.; purity: 93%; MS (m/e): 428 (MH^+).

7.3.497 5-Ethoxycarbonyl-N4-(3,4-ethylenedioxyphenyl)-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926800)

In like manner to the preparation of N4-(ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of 5-ethoxycarbonyl-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-N4-(3,4-ethylenedioxyphenyl)-2,4-pyridinediamine with methylamine hydrochloride gave 5-ethoxycarbonyl-N4-(3,4-ethylenedioxyphenyl)-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.05 (s, 1H), 9.34 (s, 1H), 8.69 (s, 1H), 7.95 (d, 1H, J= 4.8 Hz), 7.34 (dd, 1H, J= 1.2 and 7.8 Hz), 7.25 (bs, 2H), 7.13 (t, 1H, J= 8.1 Hz), 7.00 (bd, 1H, J= 9Hz), 6.81 (d, 1H, J= 8.7 Hz), 6.59 (dd, 1H, J= 1.5 and 8.4 Hz), 4.32 (s, 2H), 4.30 (q, 2H, J= 7.2 Hz), 4.21 (s, 4H), 2.63 and 2.62 (2s, 3H), 1.31 (t, 3H, J= 7.2 Hz); LCMS: ret. time: 24.12 min.; purity: 91%; MS (m/e): 481 (MH^+).

7.3.498 N4-(3,5-Dimethoxyphenyl)-5-ethoxycarbonyl-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926801)

In like manner to the preparation of N4-(ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylaminocarbonylmethyleneoxyphenyl)]-2,4-pyrimidinediamine, the reaction of N4-(3,5-dimethoxyphenyl)-5-ethoxycarbonyl-N2-(3-ethoxycarbonylmethyleneoxyphenyl)-2,4-pyridinediamine with methylamine hydrochloride gave N4-(3,5-dimethoxyphenyl)-5-ethoxycarbonyl-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-

pyrimidinediamine. ^{1}H NMR (DMSO-d6): δ 10.20 (s, 1H), 9.96 (s, 1H), 8.73 (s, 1H), 7.90 (bs, 1H), 7.36 (d, 1H, J= 8.7 Hz), 7.28 (bs, 1H), 7.12 (t, 1H, J= 7.5 Hz), 6.84 (s, 2H), 6.59 (dd, 1H, J= 1.8 and 8.1 Hz), 6.25 (t, 1H, J= 2.4 Hz), 4.31 (m, 4H), 3.67 (s, 6H), 2.63 and 2.62 (2s, 3H), 1.31 (t, 3H, J= 7.2 Hz); LCMS: ret. time: 25.50 min.; purity: 96%; MS (m/e): 482 (MH^+).

7.3.499 N4-(4-*tert*-Butylphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926714)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(4-*tert*-butylphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to yield N4-(4-*tert*-butylphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 7.90 (d, 1H, J= 3.3 Hz), 7.61 (d, 2H, J= 8.7 Hz), 7.40-7.33 (m, 3H), 7.14-7.11 (m, 2H), 6.62-6.57 (m, 1H), 4.36 (s, 2H), 2.79 (s, 3H), 1.31 (s, 9H); ^{19}F NMR (CD_3OD): -47514; LCMS: ret. time: 23.70 min.; purity: 93 %; MS (m/e): 424 (MH^+).

7.3.500 N4-(3-Hydroxyphenyl)-5-trifluoromethyl-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926742)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3-hydroxyphenyl)-5-trifluoromethyl-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to yield N4-(3-hydroxyphenyl)-5-trifluoromethyl-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 19.11 min.; purity: 99 %; MS (m/e): 434 (MH^+).

7.3.501 5-Fluoro-N4-[(1H)-indol-6-yl]-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926745)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 2-chloro-5-fluoro-N4-[(1H)-indol-6-yl]-4-pyrimidineamine and 3-(N-methylamino)carbonylmethyleneoxyaniline were reacted to yield 5-fluoro-N4-[(1H)-indol-

6-yl]-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 17.41 min.; purity: 93 %; MS (m/e): 407(MH^+).

7.3.502 N4-(3,5-Dimethyl-4-methoxyphenyl)-5-fluoro-N2-[3-(N-piperazino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R945156)

In a manner analogous to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, the reaction of N4-(3,5-dimethyl-4-methoxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethylene oxyphenyl)-2,4-pyrimidinediamine and piperazine gave N4-(3,5-dimethyl-4-methoxyphenyl)-5-fluoro-N2-[3-(N-piperazino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H NMR (CD_3OD): δ 2.23 (s, 6H), 3.24 (m, 4H), 3.71 (s, 3H), 3.72-3.81 (m, 4H), 4.75 (s, 2H), 6.81 (dt, J= 1.2 and 8.1 Hz, 1H), 7.10-7.13 (m, 2H), 7.24 (d, J= 8.7 Hz, 1 H), 7.29 (s, 2H), 7.98 (d, J= 4.8 Hz, 1H); ^{19}F NMR (282 MHz, CD_3OD): δ -163.88; LCMS: ret. time: 15.94 min.; purity: 100%; MS (m/e): 481.12 (MH^+).

7.3.503 N4-(3-*tert*-Butylphenyl)-5-fluoro-N2-[2-(N-methylamino)carbonylbenzofur-5-yl]-2,4-pyrimidinediamine R940291

In like manner to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3-*tert*-butylphenyl)-5-fluoro-N2-(2-methoxycarbonylbenzofur-5-yl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to give N4-(3-*tert*-butylphenyl)-5-fluoro-N2-[2-(N-methylamino)carbonylbenzofur-5-yl]-2,4-pyrimidinediamine. LCMS: ret. time: 23.05 min.; purity: 100 %; MS (m/e): 434 (MH^+); ^{1}□□□□ (DMSO-d6): δ 9.6 (1H, s), 9.57 (1H, s), 8.75 (1H, m), 8.25 (1H, s), 8.15 (1H, s), 7.93 (1H, d, J= 8.5 Hz), 7.47 (3H, m), 7.44 (1H, s), 7.36 (1H, t, J= 8.5 Hz), 7.25 (1H, d, J= 8.5 Hz), 2.89 (3H, d, J= 4.5 Hz), 1.33 (9H, s).

7.3.504 N4-(3,4-Ethylenedioxyphenyl)-5-fluoro-N2-[3-(2-hydroxyethylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926505)

In like manner to preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-(3-methoxycarbonylmethyleneoxy)phenyl)-2,4-pyrimidinediamine and 2-hydroxyethylamine gave N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(2-hydroxyethylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. ^{1}H

NMR (CD_3OD): δ 7.87 (d, 1H, J= 3.6 Hz), 7.37 (t, 1H, J= 1.8 Hz), 7.24 (d, 1H, J= 2.4 Hz), 7.13 (m, 2H), 7.08 (dd, 1H, J= 2.1 and 8.1 Hz), 6.77 (m, 1H), 4.38 (s, 2H), 4,22 (s, 3H), 3.63 (t, 2H), 3.40 (t, 2H, J= 6 Hz); LCMS: ret. time: 16.72 min.; purity: 98%; MS (m/e): 456 (MH^+).

7.3.505 5-Fluoro-N4-(3-hydroxyphenyl)-N2-[3-(N-2,3-dihydroxypropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926746)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N4-(3-hydroxyphenyl)-N2-(3-methoxycarbonylmethyleneoxyphenyl)-2,4-pyrimidinediamine and 3-amino-1,2-propanediol were reacted to yield 5-fluoro-N4-(3-hydroxyphenyl)-N2-[3-(N-2,3-dihydroxypropylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine. LCMS: ret. time: 12.84 min.; purity: 96 %; MS (m/e): 444 (MH^+).

7.3.506 5-Fluoro-N2-[2-(2-hydroxy-1,1-dimethylethylamino)carbonylbenzofuran-5-yl]-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine (R926715)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N4-(3-hydroxyphenyl)-N2-(2-methoxycarbonylbenzofuran-5-yl)-2,4-pyrimidinediamine and 2-amino-2-methylpropanol were reacted to yield 5-fluoro-N2-[2-(2-hydroxy-1,1-dimethylethylamino)carbonylbenzofuran-5-yl]-N4-(3-hydroxyphenyl)-2,4-pyrimidinediamine. ^1H NMR (DMSO-d6): δ 9.41 (s, 1H), 9.28 (s, 1H), 9.22 (s, 1H), 8.18 (t, 1H, J= 2.4, Hz), 8.09 (d, 1H, J= 3.6 Hz), 7.56 (dd, 1H, J= 2.4 and 8.7 Hz), 7.47 (d, 1H, J= 8.7 Hz), 7.32 (s, 1H), 7.26-7.21 (m, 1H), 7.13- 7.07 (m, 2H), 6.53 (d, 1H, J= 8.7 Hz), 5.05 (t, 1H, J= 5.7 Hz), 3.46 (d, 2H, J= 5.7 Hz), 1.32 (s, 6H); LCMS: ret. time: 17.93 min.; purity: 97 %; MS (m/e): 452 (MH^+).

7.3.507 5-Fluoro-N4-(4-isopropoxyphenyl)-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine (R926730)

In a manner similar to the preparation of N4-(3,4-ethylenedioxyphenyl)-5-fluoro-N2-[3-(N-methylamino)carbonylmethyleneoxyphenyl]-2,4-pyrimidinediamine, 5-fluoro-N2-(3-methoxycarbonylmethyleneoxyphenyl)-N4-(4-isopropoxyphenyl)-2,4-pyrimidinediamine and methylamine hydrochloride were reacted to yield 5-fluoro-N4-(4-